



A University of Sussex MPhil thesis

Available online via Sussex Research Online:

<http://sro.sussex.ac.uk/>

This thesis is protected by copyright which belongs to the author.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

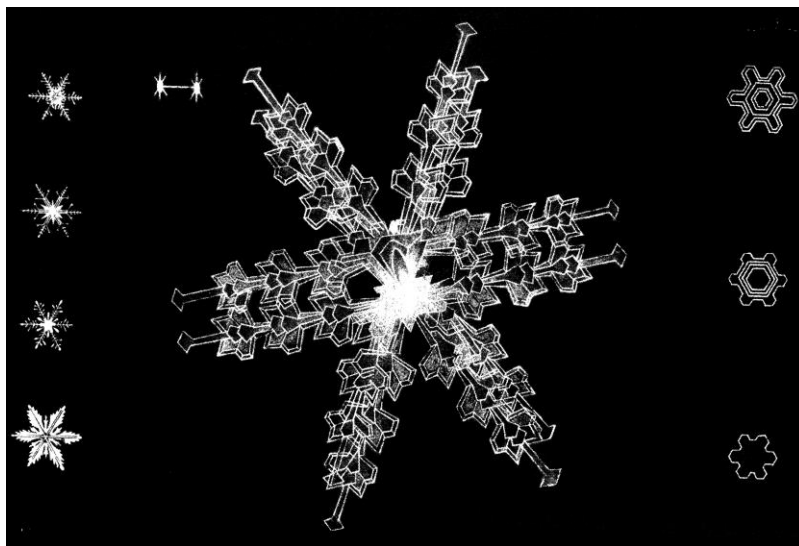
The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given

Please visit Sussex Research Online for more information and further details

THE MEANING OF ICE

Scientific scrutiny and the visual record obtained from the
British Polar Expeditions between 1772 and 1854



Trevor David Oliver Ware

M.Phil. University of Sussex

September 2013

Part One of Two.

Signed Declaration

I hereby declare that this Thesis has not been and will not be submitted in whole or in part to another University for the Award of any other degree.

Signed

Trevor David Oliver Ware.

CONTENTS

Summary.....	p1.
Abbreviations.....	p3
Acknowledgements.....	p4
List of Illustrations.....	p5
INTRODUCTION.....	p27
The Voyage of Captain James Cook. R.N.1772 – 1775.....	p30
The Voyage of Captain James Cook. R.N.1776 – 1780.....	p42
CHAPTER ONE.	
GREAT ABILITIES, PERSEVERANCE AND INTREPIDITY.....	p54
Section 1	
William Scoresby Junior and Bernard O'Reilly. Ice and the British Whaling fleet.....	p60
Section 2	
Naval Expeditions in search for the North West passage.1818 – 1837.....	p 68
2.1 John Ross R.N. Expedition of 1818 – 1819.....	p72
2.2 William Edward Parry. R.N. The First Expedition 1819 – 1820.....	p82

2.3 William Edward Parry.R.N. The Second and Third Expeditions of 1821 – 1823, and 1824 – 1825.....	p93
--	------------

2.4 William Edward Parry. R.N. Expedition to find the North Pole. 1827 –1829.....	p105
--	-------------

2.5 John Ross R.N. and his ‘residency’ in the Arctic Regions. 1829 - 1834.....	p109
---	-------------

Section 3.

3.1 The Naval Expeditions through Canada to the coast of the Arctic Ocean.1819 – 1834.....	p114
---	-------------

3.2 John Franklin R.N. Two Expeditions through Canada to the coast of the Arctic Ocean 1819 – 1822 and 1825 – 1826.....	p115
--	-------------

3.3George Back R.N. Two Expeditions to the coast of the Arctic sea 1833 – 1834 and in HMS Terror 1836 – 1837.....	p124
--	-------------

Section 4.

4.1 James Clark Ross. R.N. Expedition to Antarctica. 1839 – 1843.....	p137
--	-------------

CHAPTER TWO.

THAT FAR DISTANT AND MYSTERIOUS REGION.....	p158
--	-------------

Section 1.

1.1 The ‘all embracing’ view and the Arctic Regions.....	p160
---	-------------

1.2 Arctic Shows and the representation of ice by naval Artists. 1818 - 1834.....	p164
--	-------------

1.2 Arctic Shows and the representation of ice by naval artists 1834 – 1854.....	p171
---	-------------

CHAPTER THREE.

THE KILLING GLITTER OF THE STARS.....	p194
3.1 The Voyage of H.M.S Investigator and the completion of a North West Passage.1852 - 1854.....	p197
3.2 The Voyage of H.M.S. Assistance and the Arctic Squadron. 1852 – 1854.....	p206
3.3 The Illustrated London News. The account of the Franklin searches and for the North West passage.....	p215
CONCLUSION.....	p233
BIBLIOGRAPHY.....	p238
APPENDIX.....	p254

SUMMARY

This thesis is an analysis of the work produced by artists accompanying naval expeditions to the Arctic and Antarctic regions between 1772 and 1854. The expeditions were mainly by sea and supplemented in the Arctic by some overland. Their aims were scientific and organised chiefly, but not exclusively, in conjunction with the Royal Society of London.

Various British Governments sought strategic advantages along with international recognition for finding both a Southern Continent and a North West passage.

The thesis seeks to examine the visual accounts of ice on the expeditions comparing them with voyage narratives written by the commanders subsequently published by the Admiralty. It is also directed towards visual material used by scene painters for the popular panoramas and theatrical shows featuring Polar voyages produced in Britain during the period under examination and the objectivity given by the scene painters and showmen.

The examination is completed by analysis of Arctic conditions including ice, in new illustrated magazines from the early 1840's, *The Illustrated London News* in particular, which re interpreted source materials from voyage narratives and panoramas.

The thesis is chronologically arranged starting at the time of Captain

James Cook's voyage towards the South Pole and around Antarctica, 1772 to 1775 and his final voyage into the Arctic Ocean 1778 to 1779. when no reliable or empirically based knowledge about ice existed.

The introduction to the thesis explains the legacies created by both Cook's observations about ice from his voyage narratives as well as the sketches and engravings prepared after each voyage by two separate professional artists commissioned by the British Admiralty.

The thesis ends with the last two naval expeditions searching for Sir John Franklin and his crews, one of which made the discovery of a North West passage in 1853 -1855. By the end of the entire period the extent of the northern Canadian coastline and navigable sea and land routes between the Atlantic and the Pacific Oceans through Canada had been mapped almost completely, British scientists, including geologists, botanists, zoologists, meteorologists, glaciologists and geographers had studied many aspects of the region. The Antarctic Continent still remained comparatively unexplored but evidence from a single naval expedition after Cook showed that this South Polar region bore little resemblance to the Arctic.

ABBREVIATIONS

A. R. A.	Associate of the Royal Academy. London
C.B.	Companion of the Order of Bath.
F.R. S.	Fellow of the Royal Society. London
H.B.C.	Hudson's Bay Company. Canada.
M.I.T.	Massachusetts Institute of Technology. Boston.
K.S.	Knighthood of the Pole Star. Sweden.
R. A.	Royal Academy. London
R. N.	Royal Navy.
R. G. S.	Royal Geographical Society London.
S.P.R.I.	Scott Polar Research Institute. Cambridge.
W. S.	Wernerian Society. Edinburgh

ACKNOWLEDGEMENTS

I would like to acknowledge the help and advice I have received from many people during the course of preparing this thesis. These include the archive and library staff at the Scott Polar Research Institute at Cambridge University, Heather Lane, Lucy Martin, Georgina Cronin and Naomi Boneham. Staff at the Caird Library, National Maritime Museum, Greenwich too many to mention all by name but especially Sarah Beighton, picture librarian. These were the main sources of primary research material for the expeditions to Antarctica, Greenland, Spitzbergen, now called Svalbard, and the Canadian Arctic. Francis Herbert F.R.G.S at the Hakluyt Society and Joy Wheeler at the R.G. S for sources for the overland routes and maps and extra advice on the hydrographical record and Antarctic charts from the M.O.D Hydrographic Office at Taunton, Somerset.

I am very grateful to staff at the National Maritime Museum Greenwich, especially Pieter van der Merwe for ideas and sources concerning Captain Cook, William Hodges and John Webber. I was assisted in Canada by Vincent Lafonde and Veronique Lecat at the Canadian Museum of Civilisation on the sketches of George Back R.N.

My research on panorama productions, Arctic tableaux and shows was assisted by material from Ralph Hyde and Professor Russell Potter both of whom have extensive knowledge of this specialist subject and by primary material about scene painters at the National Art Library. The Royal Society gave advice and help with the 18th and 19th century published science relating to ice and the Polar expeditions of Parry, Ross and Franklin and the Philosophical Tracts published by Daines Barrington and Sir John Barrow in the Quarterly Review. The Royal Geological Society provided me with copies of lectures and debating records connected to controversy over the existence of the ice age which continued in Britain through the first half of the 19th Century.

Finally I wish to thank Dr Geoffrey Quilley my supervisor at the University of Sussex, for his expert guidance over the research sources and themes relevant to my subject as well as background for the broader context of 19th century exploration painting. I wish also to thank Simon Lane, Sussex Media Librarian, for his time and help with the improvements and positioning of ship locations on old and faded charts made by the expeditions.

Trevor David Oliver Ware

Chapter 1

- 1.1 Gerard Mercator. *Septentrio Nalium; Terranum description*.c.1590.Coloured Engraving. Royal Geographic Society S0005077.
- 1.2 George Best. *Map of the World Showing Frobisher's Strait*.c.1578. Reproduced in *A true Discourse of the Late Voyages of Discoverie, for the finding of the North West Passage to Cathaya, by the Northwest under the conduct of Martin Frobisher, General* .Henry Bynnyman. London.1578. BL.G6527
- 1.3 William Scoresby Jnr.1759 – 1857. *Snow Crystals* 1809.Engraved by W.&D. Lazars. Reproduced in *Account of the Northern Whale-Fisheries*. Archibald Constable and Co. Edinburgh.1820. Vol. 2. Plate VIII.
- 1.4 William Scoresby Jnr.1759 – 1857. *Close Packed Ice*. Engraving. Reproduced in *Voyage to Greenland*. G. &W.B. Whittaker. London.1809 p84.
- 1.5 William Scoresby Jnr.1759 – 1857. *Field of Ice with Water Blink*. Engraving. Reproduced in *Voyage to Greenland* .G.&W.B. Whittaker.London.1809 p113.
- 1.6 William Scoresby Jnr.1759 – 1857. *Hummoch Resembling a Temple*. Engraving. Reproduced in *Voyage to Greenland*. G .& W.B. Whittaker. London.1809. p 27.
- 1.7 William Scoresby Jnr.1759 – 1857. *Hummoch Resembling a Bear* .Engraving Reproduced in *Voyage to Greenland*. G. & W.B. Whittaker. London.1809 p. 29
- 1.8 J.C. Russell. *Sketch of the North Pole*.1817. Engraving. Reproduced in B. O'Reilly *Greenland and the adjacent Seas and North West Passage to the Pacific*

Ocean. Baldwin, Cradock & Joy. London.1818. Facing title page.

- 1.9** S. Koenig. *Luminous Arch*. Engraving.
Reproduced in B O'Reilly. *Greenland and the adjacent Seas and North West Passage to the Pacific Ocean*.
Baldwin, Cradock & Joy. London.1818. p 196.
- 1.10** S. Koenig. *Weather Gall*. Engraving.
Reproduced in B.O'Reilly. *Greenland and the adjacent Seas and North West Passage to the Pacific Ocean*.
Baldwin, Cradock & Joy. London. 1818. p 196
- 1.11** S. Koenig. *Disco and Lievely with Parhelion*. Engraving
Reproduced in B. O'Reilly. *Greenland and the adjacent Seas and North West Passage to the Pacific Ocean*. Baldwin, Cradock & Joy. London. 1818. p46.
- 1.12** S. Koenig. *The Linnaean Isles and Ice Continent and Cirrus radiation*. Engraving. Reproduced
In B. O'Reilly. *Greenland and the adjacent Seas and North West Passage to the Pacific Ocean*. Baldwin, Cradock & Joy. London. 1818.p 195. .
- 1.13** John Ross R.N 1777-1856.*Passage through the Ice. June 16th 1818*.Coloured Engraving by R. Havell and Sons. 21.5 x 17cm.*Voyage of Discovery in H.M Ships Isabella and Alexander for the purpose of exploring Baffin's Bay and inquiry into the probability of a North West passage* Captain J. Ross. K.S. John Murray. London.1824. pp 46/47
- 1.14** John Ross.R.N.1777-1856 *A Remarkable Iceberg*. Coloured Engraving by R. Havell and Sons.21.5 x 17cm.Reproduced in *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffin's Bay and inquiry into the probability of a North West passage*. Captain J. Ross. K.S. John Murray. London. 1824. fp. 47.

- 1.15** John Ross.R.N.1777-1856 *A Remarkable Iceberg.* Coloured Engraving by R. Havell and Sons. 21.5 x 17.5cm.Reproduced in *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffin's Bay and inquiry into the probability of a North West passage* .Captain J. Ross. K.S. John Murray. London.1824. fp59
- 1.16** John Ross.R.N.1777-1856. *Crimson Cliffs. A View of coloured Snow.* Coloured Engraving by R. Havell and Sons. 45 x 20 cm. Reproduced in *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffin's Bay and inquiry into the probability of the North West passage.* Captain J. Ross. K.S. John Murray.London.1824.fp 138.
- 1.17** John Ross.R.N.1777-1856. *Cape Melville and Melville Monument* .Coloured Engraving by R. Havell and Sons. 23 x 17.5cm. Reproduced in *Voyage of Discovery in H.M. Ships Isabella and Alexander exploring Baffin's Bay and inquiry into the probability of the north West passage.* Captain J. Ross. K.S. John Murray. London.1824. fp74.
- 1.18** John Ross.R.N.1777-1856. *Sir George Hope's Monument and Land in the North Side of Lancaster Bay. August 30th 1818.* Coloured Engraving by R. Havell and Sons 10.5 x 26cm. Reproduced in *Voyage of Discovery in H.M. Ships Isabella and Alexander exploring Baffin's Bay and inquiry into the probability of the North West passage.* Captain J. Ross. K.S..John Murray. London 1824. fp175.
- 1.19** John Ross. R.N. 1777-1856. *Croker Mountains and Cape Osborne at.74. 03 'N* Engraving by R. Havell and Sons.10.5 x 26.1cm. Reproduced in *Voyage of Discovery in H.M Ships Isabella and Alexander exploring Baffin's Bay and Inquiry into the probability of a North West passage* Captain J. Ross. K.S. John Murray.London.1824. fp 175.

- 1.20** John Ross.R.N.1777-1856 *A Bear plunging into the Sea..* Coloured Engraving by R. Havell and Sons..21 x 17.5cm. Reproduced in *Voyage of Discovery in H.M Ships Isabella and Alexander exploring Baffin's Bay and inquiry into the probability of the North West passage.* John Murray. London. 1824. fp.209.
- 1.21** M. Skene .R.N. 1796 -1849. *Island of Disco and Icebergs* .Coloured Engraving by R. Havell and Sons.38.0 x 20.5cm.Reproduced in *Voyage of Discovery in H.M Ships Isabella and Alexander exploring Baffin's Bay and inquiry into the probability of the North West passage* John Murray. London.1824.fp.21.
- 1.22** Map. *Parry's Route 1819.*Reproduced in *The Man who ate his boots. Sir John Franklin and the Tragic History of the North West passage.* Brandt, Anthony.Jonathan Cape. London.2011. p157
- 1.23** Frederick William Beechey. R.N.1796 - 1856. *The Crews of H.M.S. Hecla and Griper cutting into Winter Harbour. September 26th 1819,* Engraving by W. Westall. 20x 13cm. Reproduced in *Journal of a Voyage of Discovery of a North West passage from the Atlantic to the Pacific performed in the years 1819 -1820.* Commander W.E. Parry. R.N. John Murray London. 1822. Frontispiece.
- 1.24 a** Frederick William Beechey. R.N. 1796 - 1856. *H.M. Ships Hecla and Griper Blocked up with Ice in Winter Harbour* .Coloured Drawing on paper. 18.5 x32.1cm. National Library of Australia. Rex Nan Kivell Collection.T957 NK 3701/I LOC 3291
- 1.24 b** William Westall. 1781 – 1850. *H.M. Ships Hecla and Griper in Winter Harbour* Engraving.13.6 x 20.1 cm Reproduced in *Journal of a voyage of Discovery of a North West passage from the Atlantic to the Pacific performed in the years 1819-1820* Commander W.E. Parry John Murray. London 1821.fp 97

- 1.25a** Frederick William Beechey.R.N. 1796-1856. *Situation of H.M.S. Hecla and Griper. July 4th, 1819.* Coloured Sketch on paper. 35.1x14.0 cm.National Library of Australia. Rex Nan Kivell Collection AN 2892207.
- 1.25b** William Westall. 1781-1850. *Icebergs in Baffin's Bay July 4th 1819.*Engraving. 13.3 x 19.5cm. Reproduced in *Journal of a Voyage of Discovery of a North West passage from the Atlantic to the Pacific in the years 1819 – 1820.*Commander W.E. Parry. John Murray London. 1821. fp 17.
- 1.26** William Westall.1781-1850. *Icebergs in Baffins Bay.July 1819.* Engraving. 13.3 x 19.5 cm. Reproduced in *Journal of a Voyage etc.* Commander W.E. Parry. John Murray London 1821.fp 94.
- 1.27a** Frederick William Beechey.R.N.1796-1856. *Situation of H.M. Ships Hecla and Griper from 17th to 23rd August, 1820.*Coloured Sketch on paper. 18.5 x 32.1cm. National Library of Australia. Rex Nan Kivell Collection.AN2892315.
- 1.27b** William Westall. 1781-1850 *Situation of H.M.S. Hecla and Griper Sept 20th 1819.* Engraving. 13.5 x 19.8 cm. Reproduced in *The Journal of a Voyage etc* .Commander W.E. Parry. John Murray London. 1821. fp. 255.
- 1.28** William Westall.1781-1850. *Situation of H.M. Ships Hecla and Griper from the 17th to the 23rd August 1820.*Engraving.12.9 x 19.2cm. Reproduced in the *Journal of a Voyage etc.* Commander W.E. Parry. John Murray London.1821.
- 1.29** Map. *Parry's 1821- 1823 and 1824 -1825 Voyages* .Reproduced in *The Royal Navy in Arctic Exploration* .Coleman, Andrew. Tempus. Stroud 2006 p46
- 1.30** George Lyon R.N 1795 - 1832. *Situation of H.M. Ships Fury and Hecla at Igloolie. 1822 -1823* .Engraving by E. Finden. 15.0 x 21.5 cm. Reproduced in *Journal of a*

Second Voyage for the Discovery of the North West passage from the Atlantic to the Pacific. Performed in the years 1821 -1822 -1823, in H.M. Ships Fury and Hecla. Captain W.E. Parry. John Murray. London. 1824. Frontispiece.

- 1.31** George Lyon. R.N. 1795 -1832 *Eskimaux building a Snow Hut* Engraving by E. Finden. 12.5 x 18.0 cm. Reproduced in *Journal of a Second Voyage etc* .Captain W.E. Parry. John Murray. London. 1824. fp 498.
- 1.32** George Lyon. R.N. 1795 – 1832. *Eskimaux creeping into the Passage of a Snow Hut* .Engraving by E. Finden. 12.5 x 18.0 cm Reproduced in *Journal of a Second Voyage etc* .Captain W.E. Parry. John Murray. London. 1824. fp. 497
- 1.33** George Lyon. R.N. 1795 – 1832 *Interior of a Snow Hut. Winter Island. 1822.* Engraving by E. Finden. 23.0 x 19.0 cm. Reproduced in *Journal of a Second Voyage etc* .Captain W.E. Parry. John Murray. London. 1824. fp 499
- 1.34** George Lyon. R.N. 1795 -1832. *Canoe of the Savage Islands .Hudson's Strait* .Engraving by E. Finden. 14.0 x 20.5 cm. Reproduced in *Journal of a Second Voyage etc* .Captain W.E. Parry. John Murray. London. 1824. fp. 15
- 1.35** George Lyon R.N. 1795 – 1832. *Cutting into Winter Island. October 1821* Engraving by E. Finden. 14.5 x 20.3 cm. Reproduced in *Journal of a Second Voyage etc* .Captain W.E. Parry. John Murray. London. 1824. fp 49
- 1.36** Horatio Head. R.N. fl. 1820 *Landing the Fury's Stores, August 1825.* Engraving by E. Finden. 14.1 x 24.5 cm Reproduced in *Journal of a Third Voyage for the Discovery of a North West passage from the Atlantic to the Pacific. Performed in the years 1824 -1825 in H.M. Ships Hecla and Fury.* Captain W .E .Parry. John Murray. London. 1826. fp. 137.
- 1.37** Horatio Head. R. N. fl 1820. *Heaving down the Fury. 18th August 1825.* Engraving by E. Finden. 14.0 x 24.5 cm.

Reproduced in *Journal of a Third Voyage etc.* Captain W.E. Parry. John Murray. London. 1826.fp.131.

- 1.38** Henry Hoppner.R.N.1795-1833.*Situation of H.M. Ship Fury.25th August 1825.*Engraving by E. Finden.13..5 x 23.3 cm. Reproduced in *Journal of a Third Voyage etc.*Captain W.E Parry. Frontispiece.
- 1.39** Horatio Head. R. N. fl 1820.*The Wreck of the Fury. August 1825* Drawing engraved by E. Finden.25.7 x 19.7 cm. R.G. S.S0005077
- 1.40** Henry Hoppner.R.N.1795-1833. *Sailing through Young Ice. September, 1824.* Engraving by E. Finden. 11.0 x 14.3 cm. Reproduced in *Journal of a Third Voyage etc.* Captain W.E. Parry. John Murray. London 1826. fp33.
- 1.41** Artist Unknown. *Boats Hauled up for the Night.*Engraving by E .Finden. 9.5 x 12.7 cm. Reproduced in *Narrative of an attempt to reach the North Pole in boats fitted for the purpose, and attached to his Majesties Ship Hecla in the year MDCCCXXVII under the command of Captain William Edward Parry R.N. F .R.C.S.* John Murray. London 1828 fp59
- 1.42** Artist Unknown. *Travelling amongst Hummocks of Ice. 17th July 1827.*Engraving by E. Finden.9.5 x 12.6.cm Reproduced in *Narrative of an attempt etc.*John Murray.London.1828. p 91
- 1.43** John Ross.R.N.,1777 -1856. *Felix Harbour.* Colour Engraving by W. Say. 15.5 x 10.0cm. Reproduced in *Narrative of a second Journey in Search of a North West passage and of a residence in the Arctic regions during the years 1829,1830,1831,1832,1833. and the discovery of the north Magnetic Pole.* Captain Sir J. Ross. John Murray. London. 1835.fp 231.
- 1.44** John Ross.R.N.,1777-1856, *North Hendon. Snow Cottages of the Boothians.* Coloured Engraving by W. Say. 13.5 x.17.5 cm. Reproduced in *Narrative of a*

second Journey etc. Captain Sir J. Ross. John Murray
London 1835. fp. 251.

- 1.45** John Ross.R.N.1777-1856. *The Arctic Ocean. Captain Ross and the Crew of the Victory saved by the Isabella of Hull .1833.*Coloured steel Engraving by Edward Finden. 13.6 x 21.1cm. R.G.S.SO2000048.
- 1.46** Map. *Franklins route across Northern Canada 1819 - 1822.*Anthony Brandt. *The Man who ate his Boots Sir Kohn Franklin and the Tragic history of the North West passage .*Jonathan Cape. London.2011.
- 1.47** George Back R.N. 1796 -1878. *View from Portage La Loche .*Engraving by E. Finden.10.9 x 15.7 cm.
Reproduced in *Narrative of a Journey to the Shores of the Polar Sea in the Years 1819, 1820,1821 and 1822.*Captain J. Franklin F.R.S. John Murray. London 1824.fp237
- 1.48** George Back.R.N. 1796 -1878. *Expedition passing through Point Lata on the Ice. June 25th 1821.*Engraving by E. Finden. 14.1 x 20.5 cm. Reproduced in *Narrative of a Journey to the Shores of the Polar Sea etc* Captain J. Franklin F. R .S. John Murray. London 1824.Frontispiece.
- 1.49** George Back.R.N. 1796 -1878 *Expedition landing in a storm August 23.rd 1821* Engraving by E. Finden. 13.8 x20.2 cm. Reproduced in *Narrative of a Journey to the Shores of the Polar Sea etc* Captain J. Franklin F.R.S. John Murray. London. 1824.fp 395.
- 1.50** George Back. R.N. 1796 -1878. *View of the Arctic Sea from the Mouth of the Coppermine River. Midnight. 29th July 1824. c.1823.*Watercolour Drawing.13.2 x 19.9 cm. R.G.S. S020059.
- 1.51** George Back R.N. 1796 -1878. *Expedition doubling Cape Barrow ,July 25th 1822.*Colour Engraving by E. Finden.13.7 x 20.2 cm. Reproduced in *Narrative of a*

Journey to the shores of the Polar Sea etc .Captain J. Franklin F.R.S. John Murray London 1824.fp 402

- 1.52** Map. *Franklin's Second Overland Expedition 1825 – 1827*. Andrew Coleman. *The Royal Navy in Arctic Exploration from Frobisher to Ross*. Tempus. Stroud 2006 p91
- 1.53** George Back. R.N. 1796 -1878. *Winter View of Fort Franklin*. Engraving by E. Finden. 11.5 x 20.0 cm
Reproduced in *Narrative of a Second Expedition to the Shores of the Polar Sea in the years 1825, 1826, and 1827*. Captain J. Franklin. F .R.S. John Murray London. 1828. fp68.
- 1.54** George Back .R.N 1796 – 1878. *Winter Houses of the Eskimaux. July 1826*. Engraving by E. Finden. 11.5 x 19.5 cm. Reproduced in *Narrative of a Second Expedition to the Shores of the Polar Sea etc*. Captain J. Franklin. F. R.S. John Murray London. 1828. fp121.
- 1.55** George Back. R.N. 1796 -1878. *Iceberg adhering to an Icy Reef. With a view to Seaward. August 2nd 1826*. Engraving by E. Finden. 12.5 x 19.5 cm. Reproduced in *Narrative of a Second Journey to the Shores of the Polar Sea etc*. Captain J .Franklin F.R.S. John Murray. London. 1828. fp.142.
- 1.56** George Back. R.N. 1796 -1878 *Boats in a swell amongst Ice. August 24th 1826*. Engraving by E. Finden. 11.5 x 20.1cm Reproduced in *Narrative of a Second Journey to the Shores of the Polar Sea etc*. Captain J .Franklin F.R.S. John Murray London 1828.fp.171
- 1.57** George Back R.N. 1796 -1878. *Crossing Lake Aylmer. 3.00 am 1834*. Coloured Drawing. 13.5 x 19.6cm. R.G. S.D109/024079
- 1.58** George Back. R.N. 1796 – 1878. *Western View from near Mt. Barrow. 14th August 1834*. Lithograph by L. Haghe engraving by Edward Finden. 12.5 x 17.2 cm.

Reproduced in *Narrative of the Arctic Land Expedition to the Mouth of the Great Fish river and along the shores of the Arctic Sea. 1833, 1834, and 1835*. Captain George Back. F. R. S. John Murray. London. 1838. fp. 87

- 1.59** George Back. R.N. 1796 -1878. *View to Sea from Montreal Island August 1st 1834*. 1834. Watercolour Drawing. 13.2 x 19.9cm. R.G. S. D109/024074.
- 1.60** George Back R.N. 1796 – 1878. *Thunderstorm near Point Ogle .August 8th 1834*. 1834. Watercolour Drawing. 13.2 x 19.9cm. R.G.S. D109/024068.
- 1.61** Map. *Chart of the North Coast of Southampton Island showing the Track of H.M.S. Terror, 1836 -1837*. Reproduced in *Narrative of an Expedition in H.M.S. Terror undertaken with a view to Geographical Discovery on the Arctic Shores*. Owen Stanley. R.N. John Murray. London 1838. S.P.R.I. (*41)91.(08).
- 1.62** George Back R.N. 1796 -1880. *Iceberg*. c.1836 Watercolour Drawing. 23.0 x 16.1cm. National Library of Australia. Rex Nan Kivell Collection. PIC T962. NK3701/NLOC3291.
- 1.63** George Back R.N. 1796 -1880. *Ship by an Iceberg near the Hudson's Strait*. c.1842 Watercolour. 14.5 x 22.5cm. Canadian Museum of Civilisation, Ottawa. 2011.156.1
- 1.64** William Henry Smyth. R.N. 1788 -1865. *Crew of H.M.S. Terror completing Snow Walls during a heavy Gale*. Lithograph by L. Hague. 9.0 x 12.3cm. Reproduced in *Narrative of an Expedition in H.M.S. Terror undertaken with a view etc*. Captain George Back. R. N. John Murray. London. 1838. Frontispiece
- 1.65** William Henry Smyth. R. N. 1788 -1865. *H.M.S. Terror thrown up by the ice in Frozen Strait*. Lithograph by L. Hague. 9.5 x 12.6cm. Reproduced

in *Narrative of an Expedition in H.M.S Terror undertaken with a view etc* .Captain George Back. R.N. John Murray London.1838. fp160.

- 1.66** William Henry Smyth R.N. 1788 -1865. *The Crew of H.M.S. Terror saving the boats and provisions on the night of the 16th March* .Lithograph by L. Hague. Reproduced in *Narrative of an Expedition in H.M.S. Terror undertaken with a view etc*. Captain George Back. R.N. John Murray. London.1838. fp197
- 1.67** William Henry Smyth R.N. 1788 -1865. *Perilous position of H.M.S .Terror, Captain Back, in the Arctic regions in the Summer of 1837*.c.1845. Oil on Canvas. 83.8 x 121.9cm. N. M. M. London BHC3655.
- 1.68** Francis Danby.1793 -1861.*The Deluge*. c. 1840. Oil on Canvas. 70.7 x 109.0 cm. Tate Britain. NO 6134
- 1.69** William Henry Smyth. R.N 1788-1865. *Situation of H.M. S. Terror on 14th July 1837*. Lithograph by L.Haghe.9.5 x 12.5 cm. Reproduced in *Narrative of an Expedition in H.M.S. Terror undertaken with a view etc* .Captain George Back R.N. John Murray London 1838.fp265
- 1.70** Map. *Victoria land .Discovered in H.M.S. Erebus and Terror.under the Command of Captain J .C .Ross and F.R .Crozier. January 1841*. John E Davis R.N. Board of the Admiralty Hydrographic Office.5th December 1846. Ant./29/09/1.
- 1.71** John Edward Davis. R.N. 1815 – 1877..*Mount Terror and Mount Erebus Commencement of the Ice Barrier Barrier. 2nd Feb 1841*. Watercolour Drawing. 11.1 x 37.3 cm. N. M. M. London. PW 0591.
- 1.72** S. Sly. ‘*Victoria Land*’ in the *South Polar Regions discovered by Capt Sir J.C. Ross*. Engraving. Illustrated London News.22nd June 1844. No 112. Vol. IV

- 1.73** John Edward Davis. R.N.1815 –1877.*Mt Terror and Mt Erebus .Commencement of the Ice Barrier Jan 28th 1841.* Watercolour Drawing on Paper. 27.2 x 73.5cm.S.P.R.I Y72/63
- 1.74** John Edward Davis. R.N. 1815 -1877. *New Years Day on the Ice.1842. Lat 66.32 S Long 156.28.W* Watercolour on Paper.17.0 x 24.0cm. S.P.R.I. Y59/5/5
- 1.75** Richard Brydges Beechey.1808 - 1895 *H.M.S. Erebus passing through the Chain of Bergs.* c.1864 Oil on Canvas.78.7 x 111.8cm.N.M.M. London. BHC 3654.
- 1.76** John Edward Davis.R.N.1815 -1877. *The Collision to the Windward of the Chain of Bergs. 13th March.1842.*Lithograph by L.Hague. Reproduced in *A Voyage of Discovery and Research in the Southern and Antarctic regions during the years 1839 – 1843.* David and Charles Reprints Newton Abbott 1969. SPRI.(7) 91(08) Ross. fp.254.
- 1.77** Richard Brydges Beechey.1808 - 1895 *Gale in the Pack.1840.* c.1864.Oil on Canvas. 62.0 x 90.0cm S.P.R.I. No Y:2008/81/1.
- 1.78** John Wilson Carmichael.1799 -1868 *H.M.S. Erebus and Terror in the Antarctic.* 1847. Oil on Canvas. 123.2 x 184.2 cm. N.M.M. London. BHC1215

Introduction.

At the end of the 18th Century little scientifically based knowledge existed as to the extent of geographical areas, different types and chief reasons for sea ice, especially large icebergs.¹ General theories developed by captains of whaling ships, explorers and immigrants to northern and western Greenland, were often hypotheses based on personal observation and some ancient myths or speculative geography.² These whaling crews and visitor's to the Polar regions were responsible for theories such as the existence of an open sea around both the North Pole and that ice islands, or bergs, were formed in continental rivers and floated down into the two Polar Oceans. Ice did not form at sea because the movement and salinity would prevent that process. It was believed that as no land had been discovered anywhere below 63 degrees South, this meant that no land would exist above the same Northern latitude either, since the same amount of land and sea was needed at both Poles to maintain earthly equilibrium.³

The scientific scrutiny of ice started with both British and French investigation of Antarctica in search of the Great Southern Continent and British resolve to find the North West passage as a commercially

useful and convenient route between Europe and Asia. This scrutiny was performed by specialists carried on naval vessels as part of the exploration activities of the Royal Navy in both the Polar regions over seventy years. The expeditions were well documented and returned with considerable amounts of data which was made public in the form of Admiralty authorized voyage accounts. The pictorial record was essential since the appearance of ice in different locations and seasons was, for purposes concerning safe navigation of each expedition, essential. The usefulness of the visual account also depended on written records giving accurate details of the position and thickness at important locations. Different naval artists were employed to make studies under Admiralty orders and at the discretion of the ships' captain who provided the written observations. This thesis is an examination of the content of the visual account alongside the written commentary, and the central themes related to ice that were replicated many times. These came to form distinct ideas in the mind of the public associating the ice with national identity, personal heroism and sense of duty, and the presence of Deity, expressed as Divine Providence, whose actions seemed invariably to protect the British expeditions and secure their return.

The voyages of James Cook into the Southern Ocean 1772 - 1775

and the Southern Hemisphere and the Northern Pacific in 1776 – 1780, were the initial expeditions that tried to understand the appearance, movement and sources of different sea ice formations. There being no established record on which Cook could rely, unlike later voyages where the previous accounts were carried, his remarks and opinions formed an important legacy used by many of his successors.⁴ In order to establish what these important legacies were the two voyage accounts are considered in separate sections in this introduction.

The first voyage around the edge of Antarctica produced reports that were a combination of scientific expertise from two natural scientists, the professional painting skills of William Hodges as well as the considered and objective views of James Cook as navigator and Captain. The subjects that emerge were examined again by him during the later Northern Pacific and Arctic Ocean expedition during his third voyage where types and conditions of sea ice were different.

Establishment of a reliable and scientific basis for the meaning of ice could enable Cook and future British explorers to search areas around both the Poles with potentially important strategic and commercial benefits for Britain.

The Voyage of Captain James Cook. 1772 – 1775, Artist William Hodges. R.A.

The work of Phillipe Buache published in 1763, ten years before the departure of Cook, provides an insight to French views and geographical theories about Antarctica, in both size and extent, and the number and appearance of ice islands surrounding it. Evidence does not exist to show that either the British Admiralty, or Cook, accepted those views but it is probable that they had been studied by them along with other theories.⁵ Buache contended that the centre of Antarctica was not land but sea. That the ice was disgorged by rivers at least 400 leagues, 800 miles, long from the middle of Antarctica into two parts of the Indian Ocean and the Pacific South Seas. These sources having been identified by Charles Bouvet de Lozier in 1738 and by the British explorers Davis and Sharp in 1687.⁶ Buache also claimed that a north strait existed free from ice through which ships could pass through straits to reach the South Pole and that New Zealand was joined to Antarctica by a continuous chain of mountains. He published *Chart of the Antarctic Polar Circle with the Countries adjoining* (**Fig Intro 1.**) using speculative ideas presented as verifiable evidence. It was the only map of the region that existed at

the time.

The importance of accurate maps or charts was critical to all the naval expeditions and as each one returned they steadily increased the amount and reliability of general knowledge, but the maps could not predict or pinpoint the ice absolutely. The visual record contains numerous pieces of work claiming newly discovered land in the name of the Crown demonstrated by the use of flags and occasionally small buildings. But navigators had many difficulties in distinguishing between land and ice in bad weather and unfamiliar Arctic meteorological conditions. This theme is identifiable in the visual record and led inevitably to mistakes and recriminations between naval authorities, artists and the commanders.

George Forster, 1754 - 1792, one of the two natural philosophers on Cook's Antarctic voyage elaborates vaguely upon a strange sense of 'drift and change.'⁷ It was an uncharted empty and confusing environment below the 60th line of Southern latitude devoid of landmarks or any visible life other than birds and sea creatures.

William Hodges, 1744 - 1797, a professional landscape artist seems to struggle with an Antarctic scene so clearly divorced from what he knew and could recognise. The numerous and very large ice islands surrounding H.M.S. *Resolution* and H.M.S *Adventure* were the main

points of daily interest. Cook, who had nearly been wrecked on the Great Barrier Reef, shows an innate dislike to icebergs which he repeatedly describes as ‘floating rocks.’ His fear and mistrust of the ice transfers strongly into the written account and seems to give Hodges a suspicious, fearful and emotionally cold detachment for the visual account he made. The Forster’s also expressed their apprehensiveness and ‘misery’ at the surroundings.⁸ These were doubtlessly a natural reaction to the Antarctic environment and were unremarkable given the difficulties of their voyage. The mood of apprehensiveness and fear is carried on in the representation and commentary of many of the accounts of travel into Polar regions.⁹

William Hodges accompanied Cook on the Antarctic voyage whilst for the third voyage the artist commissioned was John Webber, 1752 – 1793, also a trained landscape painter. Webber seems more at ease and interested in his treatment of ice than Hodges. Both men would have seen an opportunity to advance their careers by joining Cook with the intention of painting beautiful South Pacific islands or discoveries of people and natural life subjects popular and commercially lucrative in Britain at the time. Hodges after three daring attempts was denied the coastline of the Great Southern Continent because of sea ice, whilst John Webber found little of interest worth painting on the Canadian

Pacific seaboard. One possible legacy of their inability to find and paint subject matter that offered encouragement for public support of exploration in either region, was the Admiralty decision for Polar expeditions to only employ their own officers, trained in basic coastal profile painting, for such voyages. This produced a pictorial straitjacket that recorded the encounters with ice through the prism of the naval eye, trained to keep at all times objective, simple and topographical representation uppermost.

The subjects chosen by Cook for his voyage account were illustrative of his observation and evaluation of the practical uses for icebergs as a source of drinking water. *The Ice Islands, seen on the 9th January 1773* (**Intro. Fig 2.**) by William Hodges and engraved by Thomas Pouncey shows the ice islands visited by the crews to secure water ‘perfectly sweet and well tasted,’ and make his written comments clearly.¹⁰ Although dangers existed from the foundering or collapse of an iceberg when collecting ice, Cook does not expand on these or on any reasons for such an unexpected but very welcome water supply. His objective assessment is more evident in his reaction to icebergs and pack ice during the Arctic voyage, his third and last, when he appears more certain about the source of sea ice and the reasons for its physical appearance and strength. The pack ice formations recorded

by Webber under the influence of Cooks exacting demands for absolute objectivity are close to the written descriptions. Hodges was mostly looking for subject matter for the general reader and his approach in Antarctica developed into ‘schizophrenic dithering between the demands of science and the claims of the general reader.’¹¹ The naval artists who came after him were faced with the same dilemma but conformed generally to the rules of the Admiralty rather than any stronger painterly instinct.

George Forster a naturalist who wrote an account of the Antarctic expedition on behalf of his father, John Rheinhold Forster, 1729 - 1798, gives a more enthusiastic description of the appearance and qualities of ice conditions and gives observations of light and special atmospheric phenomena.¹² Forster is curious about the strange colour of ice ‘tinged especially near the surface of the sea with a most beautiful sapphirine or beryline blue evidently reflected from the water,’ and ‘shades of white in strata between six inches and a foot thick on larger ice islands.’¹³ Forster quotes from Mairan’s *Dissertation sur le Glace* in attempts to measure the depth below water of the islands, but, like Hodges and Cook, he admits that ‘all our conjectures about its formation could not amount to more than bare probabilities.’¹⁴ His published account contains no illustrations so that

these powerful images were not represented visually if indeed they could have been painted or engraved successfully. A point frequently observed by many authors of later Polar accounts. A question persists over whether the strange light effects produced by the complicated patterns and shapes within ice could be painted competently at this time.

From the first occasion that H.M.S *Resolution* and H.M.S. *Adventure* sighted ice in November 1772 the ships log and voyage accounts repeatedly describe the dangers of ice ‘islands’.¹⁵ Comparisons of scale were possible against the size of the two ships and these were to judge height above sea level rather than their likely circumference. An attempt by John Rheinhold Forster to calculate the ratio of ice above and below the sea is wrong. **(Intro. Fig 3.)**¹⁶ This proposed equal amounts although the proportion more accurately calculated by James Clark Ross in 1839, also in Antarctica, was 8 parts below to 2 parts above. Cook asked himself questions about the islands and their formation, ‘I know it will be asked from whence the huge body of ice comes, how and when it is formed, and many such like questions’. He admits his inability to provide definite answers but challenges the little information about sea ice that he has, including the extent of the ice around the Southern Pole and how it is formed. He disputes the

contemporary view that ice was formed in rivers and floats down by these to the ocean.¹⁷ He suggests that the probable answer was that it developed inside bays contained by a landmass. As the ice fields he encountered were so large, he considers that a great extent of land was not very far off.¹⁸

The wash and watercolour painting by Hodges *The Resolution and the Adventure amongst Bergs* (**Intro. Fig 4**) shows the relative scale of these large islands. The ships are avoiding icebergs and pack ice on a sea which is semi transparent and reflect the features above the water ignoring the larger section below the surface.¹⁹ Another wash and watercolour drawing makes a strong impression of the magnificence of these bergs by the scale of the ship relative to a single large ice island, *The Resolution passing a Tabular Berg*.²⁰ (**Intro. Fig 5.**) A grim mood is given to the sea with its dark, cold, and turbulent appearance. The ice is a ghostly shape moving at four or five miles an hour because of ocean currents combined with the wind on its upper surfaces. The inward suction around its edges and strong downdrafts of wind were serious hazards.²¹ Cook studies this particular island and provides a description as, ‘of a fine light blue and transparent, but in bad weather (visibility) resembling land covered with snow.’²²

A subject returned to frequently in both descriptive and the visual

records are the strange shapes that icebergs could adopt. Forster refers to ‘singularly ruinous and so far picturesque enough icebergs’ which they had seen, and one which he compares to ‘the Gothic Arch of an old Postern Gateway.’²³ He describes, but does not draw, an ice pillar placed on one island as ‘a nude woman clad in a shroud,’ and other sculpted creations formed by the sea and the wind. His scientific mind curious to explain physical properties in the world, was in conflict with his apparent readiness to associate ice with architectural features, mountainous landscapes or human and animal forms.²⁴ Barbara Maria Stafford suggests that this approach was intended to unite his reader to the curious and unidentifiable realities of the Antarctic and the travelers emotions of fear and wonder. The same shapes made from ‘the foaming and dashing of the waves into curious holes and caverns which are formed in many of them’, moves Cook to explain how they filled him ‘with admiration and with horror.’²⁵ He acknowledges he cannot describe them adequately and that it required the ‘the hand of an able painter.’²⁶ This admission that the sight and scale of the iceberg was beyond his own descriptive capability is later made by future naval officers including John Franklin, Edward Parry and James Clark Ross during their various accounts. The unfinished oil painting by Hodges, based on a gouache by George Forster, could have been

one disappointing attempt to find that sublime quality suggested by Cook, or, for more practical reasons, assuming he worked *plein aire* it could have been too dangerous, cold, or foggy for him to complete to his satisfaction. He over painted his original study *View of Antarctica* (**Intro. Fig 6**) identified by X Ray, which shows a scene resembling the work by George Forster, *Ice Islands with ice blink*, which is dated to 24th February 1773.(**Intro. Fig 7**).

Forster's work includes a strong source of light from above a distant ice field, which illuminates the expedition ships amidst waves 'foaming and dashing' around an immense ice island.²⁷ The loom of this light is low in the sky and reflected from the clouds.²⁸ Although appointed for his ability to record by drawings and paintings 'such places in the Countries we should touch at as might be proper to give a more perfect idea thereof,' neither Hodges nor Cook may have regarded the more romantic aspects of 'floating rocks', as any part of their commission.²⁹ Joppien and Smith suggest that Hodges knew such a painting would be unlikely to attract a private buyer and, therefore, over painted it with a more commercial and romantic South Pacific subject that could be sold privately, if not needed by the Admiralty. The visual qualities in ice for which there was little public interest at this time so far as landscape paintings were concerned, were later

attempted by the naval artists who followed Hodges and Webber. Only the popularity and frequency of the Arctic panoramas in Britain from the 1820's onwards came to inform the British public of ice as a sublime part of the complete and beautiful design for the planet, as proposed by Alexander Von Humboldt.³⁰ These panoramas and shows could represent colours in the ice with ingenious and radiant light effects which is explained in Chapter 2.

The accuracy of charting and mapping any newly discovered channels or territory was the primary function for Polar accounts. Many of the naval officers who made the visual records of the voyages were also hydrographers.* This work involved constant and exact measurement of coastal landmark bearings, water depths or 'soundings' and any special topographical features to help find the exact position of a ship on subsequent visits. *Possession Bay in South Georgia* (**Intro. Fig 8**) by Hodges, engraved by Samuel Smith, includes ice covered mountains and a glacier at the extreme end of the bay. Bernard Smith comments that this work shows topographical accuracy united with an unusual atmosphere, although at first it appears to be a normal coastal profile.³¹ The rugged emptiness of the high mountains with covered snow slopes are painted from a position

* The study, surveying and mapping of oceans , seas and rivers on a chart. (Collins English Dictionary London 2009)

at sea level giving future navigators relative positions of headlands and distances. The cold detachment in the picture was noted by Cook who described it as a ‘disappointment.’ but gives no reason. The style of ‘mitigated realism in landscape which sought to combine the documentary art of the scientific voyage with some elements of the *classical* art of the academics, may not have appealed to a practical person such as Cook.’³² The naval artists of the Arctic exploration period presented their discoveries in objective ways but tried, usually with the involvement of their commander, to show them as desirable in any practical way for possession by the British Crown. Some relied upon unusual geological or topographical features to achieve this, some by the custom of giving new and distinguished names. The overland expeditions through Canada are less concerned with this part of their role than sea borne expeditions since artists had time to evaluate and select suitable choices of subject matter within the context of any newly discovered territory that was not permanently covered with snow and ice.

The difficulties and dangers of Antarctica and the Southern Ocean were so considerable that Cook became convinced that ‘the risk one runs in exploring a Coast in these unknown and icy seas is so very great that I can be bold enough to say that no man will venture further

than I have done and that lands which may lie to the South will never be explored.’³³ This emphatic rejection of future discovery was influential in dismissing previous ideas about a Great Southern Continent and to make the British Admiralty next consider the potential for exploration of the Arctic and finding a suitable route for a North West passage.

The Voyage of Captain James Cook. 1776 - 1780. Artist John Webber

In his third voyage Cook had Admiralty instructions to sail up the coast of North America as far as 65 Degrees North and then ‘to search all the rivers and inlets pointing easterly towards ‘Hudson’s or Baffin’s Bays, and to record coastlines, topographies, indigenous peoples and matters worthy of notice.’³⁴ Joppien and Smith argue that Webber unlike Hodges did not deploy any experimental, free or innovative ideas and a less linear style although by background he was like Hodges a classical landscape painter.³⁵

Webber as Cooks visual collaborator and official recorder produced a series of pictures which suggest a more interested and intense observation of the ice but with the same underlying fears and misgivings. There were fewer large icebergs but the ice pack and the coastal profiles that would have satisfied Cook and the Admiralty for objectivity and authenticity lacked sufficient dramatic content to satisfy the critical audiences of the Royal Academy.³⁶

The thick pack ice reached in Latitude 69 deg.36’ on August 26th 1778, is one occasion when Cook writes that the production of this mass is ‘of many winters accumulated ice and snow freezing and thawing although the sun contributes very little toward reducing these great masses.’ He proposes that ‘the action of the wind is instrumental

in bringing these masses together and washing parts away while the base remains firm. More ice is destroyed in one stormy season than is formed in several winters, and an endless accumulation is prevented.³⁷

The ink and wash drawing by Webber (**Intro. Fig 9.**) H.M.S..

Resolution and Discovery under the command of Captain James

Cook, 1779, interprets his conclusion and is more detailed than similar work by Hodges. The expeditionary ships are navigating through an ice field with ice in the foreground sculpted by action of winds and severe weather into jagged shapes that resemble small pieces of rocky land, They are almost transparent, although Cook remarks that this is a 'porosity' on the upper surface and his description is well resolved by Webber into showing these pieces like 'floating rocks.' The artist has placed himself at the level of the deck so that the horizon disappears a long way behind the furthest ship keeping to its course in a misty atmosphere. The reflection of light from the ice above and dim glimpses of the submerged ice below the water are a genuine account of the conditions described by Cook. Those sails that are hoisted are full, and the ships are moving ahead slowly. They avoided by very careful and frequent wearing, or tacking of both ships, being driven onto the dangerous lee shore.³⁸

Particular ships in which expeditions to the Polar regions were made become increasingly important in the exploration stories and to the treatment of the ice within the visual account. These vessels play a part that is more critical than just for the transport they provided. They have a central significance which extends into the metaphor of some kind of personal journey through life upon which an individual explorers survival is entirely dependent upon their 'Christ guided vessel.'³⁹ The ships are allocated within most of the records of the voyages, central roles as actors in and witnesses to, disturbing and dramatic events. The commissioned ships, because of the naval connection, are consistently and deliberately depicted with admiring and technically informed admiration by the professional seaman artist. Those involving the ships crushed in severe ice or being assaulted by ice floes, dominate the illustrative content of the later published accounts. These *quasi* shipwrecks are powerful visual evidence from voyages in which survival from the powerful forces of nature was obtained by the endurance and strength of each ship, often assisted by Divine Providence. The same ships even after severe damage inflicted by the ice, were chosen by later expeditions implying that loyalty and respect as well as suitability, was an important criteria in the minds of their commanders. H.M.S. *Erebus* and H.M.S. *Terror*, Franklin's lost

expeditionary ships are examples of this practice, although their final loss ultimately proved that no wooden ship however strongly constructed or lucky, could survive the ice indefinitely.

The exhibition painting in 1781 by Thomas Luny, 1759 – 1793, *Resolution and Discovery in the Arctic Sea*, (**Intro. Fig 10.**) is loosely based upon sketches made by John Webber.⁴⁰ Luny, who had never seen the Arctic, uses a more positive seascape beset with icebergs which do not accurately match those described by Cook in the Beaufort Sea. The painting puts both these famous ships close to one other sailing easily and with no sign of any immediate danger. This optimistic and commercially acceptable painting combining smooth sea and a beautiful sky, uses aquamarine tones in the small waves around the ships which seem calming and reassuring. The inclusion of some walrus as bystanders watching the ships make passage through the ice to the misty horizon establishes the special interest of humanity in their progress. It is likely to have been painted as a commemorative study following the news of Cook's unfortunate death in 1779 when his crews returned home.

Above the Bering Straits Webber found the material for *A Party from His Majesties' Ship Resolution shooting Sea Horses*. This was exhibited at the Royal Academy in 1784, (**Intro. Fig 11**).⁴¹ This

painting shows the crew trying to kill walrus for their meat. The aggressive stance of the boat crews armed with muskets, illustrates the inevitable struggle between these human invaders and the unsuspecting animals of the Arctic, represented by walrus herds. These large creatures at other times are portrayed as equally dangerous or aggressive are shown here in a docile state without fear of the men now reaching their isolated world. The scattered floe ice has the 'porosity' which Cook described as the result of the summer melting and winter freezing cycle, and the foreground ice has weathered to mouth shapes and tusks, making some direct association between the walrus and their habitat.⁴² The monstrous head and mouth in the centre foreground is an example of Webber's interest even absorption as to why this type of sea ice had the appearance of another physical substance. This feature increases the drama of the picture as do other monstrous ice shapes behind the two small boats. The larger ships in the background are part of the general narrative of the painting by showing that their sails are set ready to escape when the sailors returned. Cook was convinced that walrus meat, along with that of other Arctic mammals such as seals, should be used as food by naval expeditions seeking to avoid the scurvy caused by lack of vitamins. As a painting it is thus objective in the way that Cook and

the Admiralty wanted and so is also comparable with William Hodge's sketches of sailors gathering fresh water from icebergs. The subject matter was intensified after the voyage ended and later by Webber to ensure greater interest by the Royal Academy and the public. The theme of this physical struggle between men and animals for survival in the Arctic, although loosely commented upon in voyage accounts is not featured again with the exact detail that Webber provides.

Webber appreciated the Northern Siberia region which the expedition visited soon after Cook's death, because of the similar economic and social isolation and poverty surrounded by large snow covered mountains that may have reminded him of his native Swiss valleys.⁴³

A View in the Village of Paratounqua, 1779. (**Intro. Fig 11.**) shows this village in that exact setting. The mood of desolation and isolation in this cold and unwelcoming place are clear but the high snowy peaks suggest a sublime spiritual relationship between this and the heavenly world above. The immediate association between exile and the Siberian region was known to educated Europeans, and such an extremity of the known world had obvious curiosity appeal. The scene is rendered with a delicate watercolour study with similar tonal values shared between the land, the sea and the atmosphere.

This watercolour has a similar content to Alpine landscapes and

contrives possibly to indicate a country with similar geognostical properties and of a kind perceived in most of the known and remote frozen regions where exploration was a revelatory experience for an enquiring mind.⁴⁴ The small wooden church with a cross visible above the huts, suggests a communal confidence in the Deity even in such an empty and lonely place as this.

Webber, along with other travelling artists such as Joseph Acerbi and Arthur Capell Brooke in Scandinavia, and Anton Mayer in Iceland, helps establish an ‘idea of the North.’⁴⁵ An identity for the Arctic and sub-Arctic regions of a beneficial socially neutral state and of the repository and representational archive which ‘elevated the wild brute or naïve specimen to the position of rival or primitive twin to mankind’s entirely cultivated and artificial achievement.’⁴⁶

These ‘frigid zones and their wonderful productions of ice’ described by William Scoresby Jnr. were the subject of lengthy enquiry examined in my later chapters. From the mainly classical representational style work from Hodges and Webber followed an intense scientific scrutiny of ice which sought reasons for its inconsistent performance and appearance and the enormous tracts that covered the sea and land routes for the potential North West passage. Some of these questions were answered and the illustrative accounts

made of the ice combined the work of different scientists, explorers and the various naval artists instructed by the British Admiralty. The ideas and themes they provide in their various records are consistent with the two voyages of Cook into the different Polar regions identified in this introduction.

¹ Michel Lomonos. *Swedish Transactions*. Collection Academique. Paris 1772. TOM. XI. This includes a section titled “ De L’Origine des Mont de Glaces dans le Mer du Nord”. and judges that “ the ice is more formidable in appearance than fatal in its effects. p82.

² Daniel Crantz. *History of Greenland* c. 1765. This is recorded by George Forster as having been on board H.M.S. Resolution with the party. George Forster one of two naturalists accompanying James Cook.

³ Daines Barrington. F.R.S. *The Probability of reaching the North pole discussed by Daines Barrington.F.R.S.* Royal Society. May 19th 1774. Tracts. X17/2 -3.

⁴ Philip Edwards. *The Story of the Voyage*. Cambridge University Press. Cambridge. 1994. p 8. ‘Publications relating to earlier voyages were essential items of equipment on every new voyage.’

⁵ *Geographical and physical considerations including a theory of the Antarctic regions and the frozen sea which they are supposed to contain, according to the hypothesis of the celebrated M. Buache*. Gentleman’s Magazine. William Pickering and Son. London. January. 1763. pp32 - 36. British Library. BLL01002844939.

⁶ Jean Baptiste Charles Bouvet de Lozier. (1704 - 1786). Through navigational error De Lozier believed he had discovered a part of Antarctica at a place he named Cape of Circumcision but he was unable to land due to fog. In fact it was an island and being incorrectly charted, served to confuse both James Cook and James Clark Ross on their later searches for the Continent

⁷ George Forster Jnr. *Voyage Round the World*. (Ed.) Nicholas Thomas & Oliver Berghof. J. Newell. Honolulu. Vol 1. ‘ *Stupendous large and high ice islands, likewise solid but formed in the most strange manner into points, spires, and broken rocks extended as far as the eye could see. However it is likewise remarkable that in different years we found the ice differently situated.*’ p125.

⁸ George Forster Jnr. *Voyage Round the World* (Ed.) Nicholas Thomas & Oliver Berghof. J Newell. Honolulu. p 109.

⁹ Barbara Maria Stafford. *Voyage into Substance .Art, Science, Nature and the Illustrated Travel Account, 1760 -1840*. MIT Press. Cambridge. MA. 1984. Naval practice seems to comply with that proposal in which the ‘explorer established an optic that was antithetical both to the Olympian perspective of distant uninvolved contemplation and to the narrowly subjective convention of personification.’ p.467.

¹⁰ Captain James Cook R.N. F.R.S. *A Voyage towards the South Pole and Round the World performed by H.M.S. Resolution and H.M.S. Adventure in 1772 - 1775*. W. Strachan & T. Cadell. London. 1778. Vol.II p. 31.

¹¹ Phillip Edwards. *The Story of the Voyage*. Cambridge University Press. Cambridge. 1994. p.123.

¹² Georg Forster.F.R.S. *A Voyage Round the World.in H.M.S. Resolution commaned by Captain James Cook. 1772,1773,1774, and 1775*. London 1777. White, Robson, Emsley, & Robinson. Vol 2.Many icebergs gave full scope to our imagination.’ p.141

¹³ Georg Forster.F.R.S. *A Voyage Round the World in H.M.S. Resolution commanded by Captain James Cook. 1772,1773,1774, and 1775*. White, Robson, Emsley & Robinson. London. 1777. Vol.1 p.101.

¹⁴ Georg Forster. F.R.S. *A Voyage round the World in H.M.S. Resolution commanded by Captain James Cook. 1772,1773,1774, and 1775*. White, Robson,Emsley, and Robinson. London. 1777. Vol.1 p.95

¹⁵ Captain James Cook R.N. F.R.S. *A Voyage towards the South Pole and Round the World performed by H.M.S Resolution and H.M.S. Adventure*. W. Strahan and T.Cadell. London .1778. The Journal records Ice Islands 2 miles in circuit and 60 ft high on the 13/12/1772. Cook commented ‘this exhibited a view which for a few moments was pleasing to the eye; but when we reflected upon the danger, the mind was full of horror.’p.23.

¹⁶ Johann Reinhold Forster *Diagram of an Iceberg.A Voyage round the World in H.M.S. Resolution commanded by Captain James Cook. 1772,1773,1774,and 1775*.W.Strahan and T. Cadell. London. 1778. The measurements used by Forster accompanying this diagram states, ‘the ice was 204 ft above water: it is now generally proved, that Ice Swimming in water is 7/8th of its height under water constitutently the Mass of this Mountain must have been 1400 feet under the water which is almost incredible.’p.98 Note. Forster draws the proportions the wrong way round so that in fact the proven proportions are 9/10ths below the water.

¹⁷ Ibid. I know it will be asked from whence cometh this huge body of ice comes, how and where it is formed and many such questions.’ He suggests that Crantz a Danish missionary whose work was carried on *Resolution* was wrong to propose that because the ice from floes was drinkable they had come from fresh water sources and were added to gradually by snowfall. p 393

¹⁸ Ibid. Cooks opinion was that behind the field ice which was extremely dense lay large areas of land. p.57.

¹⁹ Ibid. Cook refers to many that were ‘so big they are mistaken for land on many occasions.’ p. 57.

-
- ²⁰ William Hodges. *The Resolution and the Adventure among Bergs*. Watercolour Drawing Mitchell Library University of New South Wales. Canberra. D11. 27/b.
- ²¹ William Hodges. *Resolution passing a Tabular Iceberg*. Watercolour Drawing. Mitchell Library. University of New South Wales. Canberra. D11 27/b.
- ²² John C. Beaglehole. J.A Alexander. J.W Davidson. R.A Skelton.R.A.*The Journals of Captain James Cook on his Voyages of Discovery*. Hakluyt Society. Cambridge University Press. 1961. Vol 2.(1772 - 1775). P57.
- ²³ R.Joppien and Bernard Smith. *The Art of Captain Cooks Voyages*. Vol 3. *The Voyage of the Resolution and Siscovery*. 1776 -1780. Yale University Press. London and New Have, 1988 p26.
- ²⁴ George Forster F.R.S. *A Voyage Round the World in H.M.S. Resolution commanded by Captain James Cook.1772,1773,1774,1775..*B.White.J.Robson. P. Emsley. G. Robinson. London 1777. Vol.1 'Each traveller saw the same object in the same manner and each reported the fact differently according to his sensations and his peculiar mode of thinking.' Preface p.xi.
- ²⁵ Captain James Cook R.N. F.R.S. *A Voyage towards the South Pole and Round the World performed by H.M. S. Resolution and H.M. S. Adventure in 1772 - 1775*. W. Strahan & T. Cadell. London 1778. p.57
- ²⁶ Captain James Cook.R.N. F.R.S. *A Journey towards the South Pole and Round the World performed by H.M.S. Resolution and H.M.S. Adventure in 1772 - 1775*. W. Strahan & T. Cadell. London. 1778. p 57. In Hodges Cook had such a painter but the capture of such a sublimely romantic view does not seem to have been valued to the same extent by him.
- ²⁷ Captain James Cook R.N. F.R.S. *A Journey towards the South Pole and Round the World performed by H.M.S. Resolution and H.M.S. Adventure in 1772 - 1775*. W. Strahan & T.Cadell. London. 1778. p.98-99.
- ²⁸ Pieter van der Merwe. *Admiration and Horror in the Southern Ocean*. William Hodges 'Icebergs' Unpublished article. N.M.M. London. 2008..
- ²⁹ Captain James Cook. R.N. F.R.S. *A Voyage towards the South Pole and Round the World performed in H.M.S. Resolution and H.M.S. Adventure in 1772 - 1775*. W. Strahan and T.Cadell.1778. Introduction p.xxxiv.
- ³⁰ Alexander von Humboldt *Aspects of Nature in different lands and different Climates with scientific Elucidations*. 1808. The 'Art of Man should disjoin and present in a separated state Terrestrial substances you would seek in vain in the interior of the Earth and in the Oceans of air and water'.

³¹ Bernard Smith. *European Vision and the South Pacific*. Yale University Press. London 1985. p. 61.

³² Bernard Smith. *European Vision and the South Pacific*. Yale University Press. London. 1985. p.80.

³³ James Cook R.N. F.R.S. *A Voyage towards the South Pole and Round the World performed in H.M.S. Resolution and H.M.S. Adventure in the years 1772 - 1775*. W. Strahan and T.Cadell. London 1778.Vol 2 p.231.

³⁴ *A Voyage to the Pacific Ocean undertaken by the Command of His Majesty for making discoveries in the Northern Hemisphere performed under the direction of Captains Cook, Clerke and Gore*. Published by The Lords Commissioners of the Admiralty. London 1780. Intro.xxxiii. This instruction makes clear the Admiralty's disregard for any further expeditions to Antarctica and the 'imaginary paradise' supposed by Campbell, de Broffes and de Buffon.

³⁵ Rudiger Joppien and Bernard.Smith, *The Art of Captain Cooks Voyages*. Vol 3. *The Voyage of the Resolution and Discovery., 1776 - 1780*. Yale University Press. London and New Haven. 1988 .p.2.

³⁶ *St James Chronicle, or, British Evening Post* ,24 -27th May 1788. p4.

³⁷ *A Voyage to the Pacific Ocean undertaken by the Command of His Majesty for making discoveries in the Northern Hemisphere performed under the direction of Captains Cook, Clerke and Gore*. Published by the Lords Commissioners of the Admiralty. London.1780. Vol.2.pp 462 - 463.

³⁸ *A Voyage to the Pacific Ocean undertaken by the Command of His Majesty for making discoveries in the Northern Hemisphere performed under the direction of Captains Cook, Clerke and Gore*. Published by the Lords Commissioners of the Admiralty. London.1780 Vol. II .p 418.'Our situation was now more and more critical, we were in shoald water upon a lee shore and the main body of ice in sight to windward driving down upon us.'

³⁹ George Landow. *A typology of Shipwrecks and Imperilled Mariners*. [www.victoria web.org/art/crisis.4](http://www.victoria.web.org/art/crisis.4).

⁴⁰ J.F. Allen. *Thomas Luny and Cook's Resolution*. *Mariners Mirror*. Vol. 90. 2004. pp.85 - 90.

⁴¹ *Smoking Coasts and ice- bound seas: Cooks Voyage to the Arctic*. G.Williams, G.Quilley, S.Arutiunov, S.Forgan. Exhibition Catalogue. Whitby. 2008. p 19. One of three works submitted by Webber and considered as the most ambitious.' Well chosen to arouse popular interest.' Nor according to Joppien and Smith was it 'too exotic'.

⁴² James Cook. *The Journals of Captain James Cook on his voyages of Discovery*. (Ed.) J.C. Beaglehole. Hakluyt Society. Cambridge. 1955 - 1967. Vol.3 p 427.

⁴³ A .Wilton. *Journey through the Alps*. William Pars. De Clivio Press. Zurich.1979 p28

⁴⁴ William Wordsworth. *Lines composed a few Miles above Tintern Abbey*. (Ed E de Selincourt and Helen Darbyshire) 2nd Edition. OUP. Oxford. 1954. Vol 2.

⁴⁵ *Smoking Coasts and ice- bound Seas: Cooks Voyage to the Arctic* .G.Williams, G.Quilley, S. Arutiunov, S.Forgan.Catalogue to the Exhibition at the Captain Cook Museum. Whitby.2008. p 33.

⁴⁶ Barbara Maria Stafford. *Voyage into Substance. Art, Science, Nature and the Illustrated Travel Account.1760 -1840*. MIT Press. Cambridge.MA.1984.pp 351 and 438.

Chapter One

Great abilities, perseverance and intrepidity.

In this chapter I am examining the pictorial record of ice brought back to Britain from voyages and over land expeditions into the Polar regions by naval expeditions. This examination is chronologically arranged because the work was produced by a small group of artists who were each contributing, Philip Edwards considers, to one overall project and took preceding accounts as an essential part of their equipment.¹ The same artists took part in different expeditions and their accounts develop as their personal experience and understanding of the ice increased. The directions each artist was given by his commander can be related to the pictures he produced by following the chronological order since many sketches were used to complete the visual record for a voyage to overlay the hydrographers' chart of their route. The voyage accounts are used to compare the written commentary with the visual treatments. The essential objectivity of these publications was because they were an historical record of the scientific and geographical objectives and attainments of each expedition. Some importance was also given by the Admiralty in their official record to the need to obtain public support and confidence in

the work in order to obtain money from government. The visual accounts by providing a more interesting and compelling story of each voyage made a significant contribution to the analysis and understanding of the science undertaken in the Arctic by the public. The expeditions examined in this chapter were between 1818 and 1837 and are described by John Barrow in, *A Chronological History of Voyages into the Arctic Regions*.²

Barbara Maria Stafford proposes that, ‘during the course of the eighteenth century artists discovered the multiple faces of landscape as specifically understood and experienced by geologists, mineralogists and botanists, the new and verifiable ideas about the earth’³ The intention in this chapter is to look for the proof that ‘verifiable’ states of ice and snow were identified and recorded during the searches for the North West passage. A large body of work was produced as a consequence of a detailed examination of the Arctic region by specialists and scientists. Those individuals included several able artists who drew new species of animals, birds and flora as well as artefacts and ethnic characteristics of the native inhabitants, geological specimens and fossils, and meteorological events. Very few however dedicated time to the study of ice. The chapter seeks to discover why a field so vital to the success and survival of each

expedition and the project as a whole, was not evaluated as thoroughly as possible despite much new data being available.

The accounts of ice are usually concerned with its menacing size and behaviour, the threatening situations rapidly created and the heroic efforts by the expeditions to escape from impending disaster. The theme is of a contest between men and the ice prevalent in all written commentaries which appears to override details of the variety of form and features as well as the colours in ice. Louis - Anthoine de Bourgainville, 1729 -1811, the French explorer, compared the soldier with the lonely navigator in the uncharted seas, '*souvent ennemis, qu'il lui faut combattre des dangers tristes et sans cesse renaissans.*'⁴ As an exponent of Arctic exploration ideas such as his were discussed at length by the British Royal Society, and seem to set a militaristic tone for the Polar voyages made by the British.

The history of exploration in the Arctic regions began during the 16th and the 17th centuries with three British expeditions led by Sir Hugh Willoughby, 1553-1554, Sir Martin Frobisher 1576-1576, and Richard Hakluyt in 1582. A globe of the world from the early Renaissance period, possibly by the Flemish cosmographer Frisius, connected the Atlantic to the Pacific Oceans. Mercator's 16th century speculative map showed open ocean around the North Pole (**Fig 1.1**) Frobisher's

The Straits of Anian (**Fig 1.2**) was also used as evidence for such a passage by John Barrow, Second Secretary to the Board of the Admiralty in 1819, and chief exponent of the British naval expeditions during the first half of the 19th century. His conviction being that above Lat.70 Degrees North, an open Polar sea existed.⁵

An expedition, contemporary with that Captain James Cook's second voyage, was led by Captain Constantine John Phipps R.N. (1744 – 1792) with H.M.S .*Racehorse* and *Carcass*. This was partly inspired by the Swiss geographer Samuel Engel (1702 – 1784), who believed there was an open route to the Pacific over the North Pole.⁶ Phipps eventually reached Latitude 80 Degrees North above Spitzbergen, but found a barrier of sea ice and turned back.⁷ The large financial resources needed to prove such an important new piece of geography only became available after the end of the Napoleonic Wars.

In the first section of this chapter I describe ways in which a visual vocabulary applicable to ice and its atmospheric, or 'fugitive' effects, had been developed British whaling fleet. The two main authors and artists, William Scoresby Junior (1790 -1857) and Bernard O'Reilly, (cf 1790 – 1830), were involved separately with the West Greenland whaling industry. Both men kept journals of their observations and experiences that were practical guides to types of sea ice and their

atmospheric conditions useful for naval commanders from the start of the expeditionary era.

The second section is a chronological record of naval expeditions from 1818 onwards that began to search for the open Polar sea and a North West passage. The Admiralty voyage accounts written by the senior officers, had to report on expeditionary results compared with their instructions and orders. This included their list of scientific studies using illustrations to support the narratives. My examination seeks to determine the objectivity and accuracy of the visual record during the constant encounters with ice at sea.

The third section concerns those expeditions made across northern Canada to the Polar coastline seeking inshore routes for any North West passage. They were intended to complement the charts and maps from expeditions by sea and had mostly complementary scientific aims. They were land surveys with sketches of topographical landmarks and charts of navigable rivers and lakes, as well as new flora and fauna discovered during the journey. The drawings and explanations of ice are placed in a different context amongst these rivers and lakes and on the Arctic coastline. The strong rivers and rapids were serious hazards on these journeys since they became quickly dangerous and unpredictable in melting ice conditions whilst

the coastline was usually concealed in fog.

The failure by Cook to discover a Great Southern Continent in 1772 - 1775 and his dismissive comments as to the benefits of any further exploration, meant that no British scientific expeditions into the southern hemisphere took place until the late 1830's. One later expedition to Antarctica between 1839 and 1843, produced enough evidence to vindicate Cook's observations about the sources of icebergs and also discovered Victoria Land, part of the Antarctic Continent which possessed two active volcanoes, and the ice barrier afterwards named the Ross ice shelf. The fourth section of this chapter examines how these discoveries were described and illustrated in the voyage account and painted in very contrasting ways by two professional marine artists.

Section 1. William Scoresby Junior and Bernard O'Reilly. Ice and the British Whaling Fleet.

The significance of William Scoresby Junior to the study of sea ice is considerable. An experienced whaling captain with an aptitude for and keen interest in scientific matters, his descriptions of sea conditions around West Greenland and Spitzbergen of the northern whale fisheries and the records of ice in different areas, published in 1820, gave navigators a valuable background to the ice forms he had witnessed. There were identifiable and simple drawings for types of ice and written descriptions.⁸ The Scoresby journals, taken from his seventeen whaling voyages between 1811 and 1820, describe the stages through which ice formations developed in the sea and the likely causes of the 'iceberg' which he maintained was their correct name rather than Cook's, 'ice island.'⁹ The observations and detailed descriptions Scoresby made of the reduction in the Atlantic ice field in 1816 and 1818 helped persuade the Royal Society through its President Sir Joseph Banks (1744 – 1820) and the Admiralty to search once more for the North West passage. Although his expertise and experience was recognised by Banks he was not chosen by the Admiralty for any naval expedition despite other less experienced whaling men being selected as ice specialists. His drawings and

descriptions of snow flakes and ice crystals are also complementary to studies by Bernard O'Reilly, an explorer, author and artist, who joined a whaling fleet fishing off Greenland in 1817. His work is concentrated on the unusual effects and weather conditions over the ice pack and of distortions to actual distances and land shapes produced by different atmospheric and sea temperatures. Both were key sources of written and visual information taken by naval expeditions to improve their own study of meteorology and weather and to find any ice free channels for a safe passage.¹⁰

Scoresby's drawings of snowflakes which he proved were the result of precipitation at varying temperatures, are the earliest attempt in Britain to catalogue the subject. *Snow Crystals*, 1809. (**Fig 1.3**) His research was presented in a lecture to the Wernerian Society in Edinburgh, entitled, *On the Greenland or Polar Ice* in January 1809. Scoresby's study was invaluable to the understanding of ice and the seas around Greenland and the Davis Straits. The types of ice he lists were experienced by whaling ships that worked only during the summer months of the year and do not include more dangerous pack and floe ice moved by winter storms. Scoresby as a scientist recorded differences between sea and fresh water ice, explaining the separation of saline in ice at freezing temperatures on the surface of the sea. He

reported that land was unnecessary for the formation of sea ice which Polar navigators, including Cook, had found difficult to believe. New ice, he reported, could be found twenty leagues, approximately sixty miles, from Spitzbergen without any substance that could instigate the process and would, even if ‘hindered by brisk winds and waves of the North Sea and Western Ocean,’ continue to spread. An observation of considerable relevance to all Polar navigators and ships captains.¹¹

The drawings of sea ice forms and types are simple but clear enough for identification. *Close Packed Ice* (**Fig 1.4**) and *Field of Ice with Water Blink* (**Fig 1.5**) were published in *Voyage to Greenland*. The illustrations throughout this work are without an engravers name and must be presumed that copies were made by the printer directly from Scoresby’s own sketches. His treatment show cloud shapes and light reflection over ice fields or ‘pack,’ commonly known in the whaling fleet, as the ‘blink.’* This is described in his text with advice on ways ships might navigate by use of this ‘blink,’* to find open water.

For several drawings of unusually shaped floating ice, often seen in bays where several drifting icebergs had joined together, Scoresby chooses not to comment or speculate on the causes for the shapes

* Scoresby refers to this as ‘ice blink ’ A refraction of light from ice that distorts distances and creates unusual optical effects. *An Account of the Arctic Regions* .Vol 1.Section 5. p383.

observed; his preference is to describe them as ‘convulsions of nature.’¹² He seems like many seamen, including Cooks’ crew, willing to find similarities to animals or buildings. *Hummoch resembling a Temple* (**Fig. 1.6**) which Scoresby notes without the scientific inspection he had learnt from his years at Edinburgh University.¹³ *Hummoch of Ice resembling a Bear* (**Fig 1.7**) has the detail in the head and body of the bear suggesting he imagines some physical connection between ice and the natural life of the region. At this time the influential views of the German natural scientist and philosopher Alexander Von Humboldt 1796 -1859, in *Nature in Different lands and Different Climates. With Scientific Elucidations*, published in 1808, argued that ‘no terrestrial element is to be found anywhere in its pure and primitive simple state. Each as soon as it is formed tends to enter into new combinations and the *art of man* is needed to disjoin and present in a separated state, substances you would seek in vain in the interior of the earth and in the oceans of air and water.’¹⁴ The resemblances and highly imaginative conjecture about these visions were a shared interest of the sailors, artists and most scientists during Arctic expeditions.

Sir Joseph Banks read Scoresby’s reports concerning the unusually large reduction in sea ice west of Greenland, and suggested a joint

scientific and naval expedition to find a navigable North West passage.¹⁵

The two volumes of *An Account of the Polar Regions*, described by Rosily and Rossel as coming ‘from a man with a united mind and a genius for observation which rendered also the accounts of William Dampier so interesting and informative,’ were used as essential reading for naval expeditions and referred to as such by both Sir Edward Parry and Sir John Ross, acquaintances and admirers of Scoresby¹⁶

The published account by Bernard O’Reilly, an explorer and writer who joined a whaling ship in the summer of 1817, are less scientific and more self opinionated about the Arctic weather and ice. His drawings, ‘made by the Author on the spot’, show an interest in the ‘atmospherology’ that both he and Scoresby had witnessed.* The skies and many fugitive effects created by the ice are documented and described very comprehensively some of which are complementary to the scientific approach of Scoresby.¹⁷ A map, the extent of knowledge in 1817 of land and countries bordering the North Pole, introduces his book (**Fig 1.8**). O’ Reilly decided that the proposal for reaching the

* Scoresby in *An Account of the Arctic Regions* Vol 1 Sect 5 concludes that the Arctic region is special because of combinations of low temperature, high humidity, refraction and reflection of light and strong wind.

North Pole by sea and thence to the west was a 'utopian paper built plan long since defeated by the experience of whalers and navigators such as Constantine Phipps, who penetrated to Latitude 82 Degrees north on the Spitzbergen side of Greenland finding only interminable ice' and declared it was a project of 'absolute futility.'¹⁸ Twelve illustrations show the whaling fleet fishing in sheltered waters over which a variety of strange and beautiful skies are seen. In *Luminous Arch* (**Fig. 1.9**) a fleet of whaling ships with harpoon boats and their crews are in ice free water with a sky he describes as being, 'the whole interior of the arch was strongly luminous and objects within its compass partook of that illumination and has not been noticed in any publications before.'¹⁹

The engraver, S. Koenig, attempts to reproduce this and other sky effects, simply. These include *Weather Gall* (**Fig. 1.10**) a sign of approaching bad weather, and *Disco and Lively with Parhelion* (**Fig. 1.11**). The types of clouds layered just above the horizon, signify a changing barometric pressure, whilst the light refraction of the *parhelion* is clearly shown.²⁰ In one engraving *The Linnaen Isles and the Continent with Cirrus Radiation* (**Fig 1.12**) are described as a 'magnificent display' and 'an amazing span covering several leagues of sea,' its appearance producing a sharp variation by the compass

needle.²¹ The suggestion O'Reilly makes is that the reason for this variation needed thorough examination and was worthy of an entirely separate study within Arctic meteorological science.

O'Reilly observes the ice and weather for any useful predictive weather signs and tries also to interpret such phenomena as 'acicular snow.' Although he describes passing the 'largest berg yet seen, July 17th 1817,' no drawing or engraving appears in the account. The iceberg he describes is 'riven into canyons and with its waters edge heaped with fragments like mountain debris.' He supposes that these are formed by 'land floods' his own name for glaciers, which 'descend from the Ice Continent above the *Linnaen Islands* in Hudson Strait and its bays; 'pieces released by the sun, rent asunder from the Continent are precipitated into the sea.'²² His conclusion was correct without any first hand observation, for this was the source of the large icebergs floating down the Davis Straits into the northernmost Atlantic.

The work of O'Reilly and Scoresby are insightful as well as objective about sea ice, water temperatures, weather signs and suggestions for new whaling grounds. Their sketches of ice made during summer months, mostly near to the Western coast of Greenland were not at all typical of the ice in much higher latitudes or in winter. They chiefly reinforce one important field in ice science namely that the weather

and ice produce unique forms of atmospheric phenomena linked to magnetism and compass variation so that future work had to be connected, not strictly demarcated between separate scientific disciplines.

British whaling fleet knowledge and the experience gained in ice caused the Royal Navy to employ as pilots men from the whaling fleet on all expeditions as 'ice masters,' however the well argued and united opinions of Scoresby and O'Reilly that a trans Polar route by sea was impossible, was totally disregarded.

Section 2. Naval Expeditions in search for a North West passage between the Atlantic and Pacific Oceans. 1818 - 1837.

The Arctic regions to most British people at the beginning of this period were more mysterious and terrible than the Alpine regions had been before the 1760's. The Grand Tour artists including John Robert Cozens, 1752 - 1797, William Pars, 1742 - 1782, and Francis Towne, 1739 - 1816, returned with scenes painted for their patrons of large glaciers, mountain peaks and rock masterpieces including picturesque gorges and cliffs. Their picturesque paintings and notes of impressive mountain geology and glacier morphology, including the source of the Arveyron from a cave of ice, the scenery close to the glaciers of Chamonix, Bernina, Lauterar, Grindelwald, and Mount Furca and the sources of the rivers of the Rhine and the Rhone, were of wide intellectual interest.²³ The Arctic by comparison in the early 19th century was held to be 'the darkest and most imperfect parts of our map.'²⁴

The first naval Arctic expeditions coincided with emerging ideas and explanations for the age and surface appearance of the earth. The geological constituency of the planet and the 'force filled' order of the universe into which glaciers and volcanoes were seen to fit, was being re evaluated and contested. The need for careful and exact description

and an awareness and ‘alertness to the human desire to inflict oneself upon the world leading to a denial of self imposition, illusion and unguided imagination’ was much debated.²⁵ Barbara Maria Stafford states,

‘ Artist’s discovered the multiple faces of landscape as specifically understood and experienced by geologists, mineralogists, and botanists, the promulgators of new and experimentally verifiable ideas about the earth.’²⁶

Arctic expeditions were also of public interest because they, like earlier voyages of discovery, demonstrated a British determination and ingenuity in their pursuit which would increase national prestige.*

This despite a lack of any historical and biblical associations which the new Middle Eastern travel accounts gave of a romantic and lost pre-industrial world. Robert David suggests that despite this, the excitement, danger, and collective heroism demonstrated by Arctic exploration overcame the ‘otherness’ which could have counted against these travel accounts.²⁷

The images of ice from the North West passage voyages were produced by trained artists chosen by the Admiralty Commissioners from a group of serving officers. The rules applied by the Admiralty

* Chauncey C. Loomis considers this was connected also to a belief in British manhood and authority. *The Arctic Sublime* California Press 1977.p95

were specified as ‘plain distinct’ laid down in the *Extracts of View Directions*.²⁸ Officers were directed to engage in the collection of minutiae for course making and safe navigation. Celestial navigation as well as meteorology, hydrography, and astronomy gave ‘no time to waste on elaborate drawings.’ The intensity of the naval effort in such new sciences and to applied mathematics was to improve accuracy for published charts and to develop navigational efficiency by testing new inventions.²⁹ When necessary sketches were mostly used to supplement measurements or records of ice thickness, types and occasionally positions, but were not presented in a catalogued manner comparable to that used by Scoresby. There were no explanations about ice conditions prepared for later ships to follow in the same or different months in specific locations. The weather conditions that often made ice form were not generally described or identified or given a means of prediction. The navy resorted only to the ‘ice master’ on whose judgement and experience both their lives and ships depended.

The log and journals kept by naval officers for all voyages had always to maintain a simplicity, accuracy, clarity and strict objectivity. This was established by direct Admiralty instruction but also by the widely admired examples kept by Captain James Cook. The pictorial

accounts are in step with these requirements and resort to few other elements outside the written account. The sense of isolation and a separation or ‘otherness’ from the rest of the world, particularly the constant light of summer or absolute darkness of winter, seems to help develop an autochthonous response to the frozen landscape.

Expeditions that remained locked into the Arctic landscape during several winters, produced images which, when published in Britain, were reported by newspapers and magazines as evidence of the ‘near to death’ aspects of Arctic travel. This is expressed succinctly by Russell Potter as,

‘The stars at midnight, the nearness of death, the immobility of the ships in the ice, the utter isolation and the vast inexpressible smallness of humanity.’³⁰

The trapped ship, in a state of near shipwreck, trapped in the Arctic *locus* was, conceivably, another part of the general discourse about the sublime based on different travel accounts about newly discovered landscapes, as well as popular romantic fiction and new collective tastes. The pristine space of the Arctic had potential value as a ‘pleasurable’ experience for audiences. Stafford, referring to the descriptions of one expedition commander suggests that,

‘there is something imposing, we may say sublime, in the very idea of

unbounded space which it occasionally presents; and every trifling object which appears above its untenanted surface assumes an interest which we should not on other occasions attribute to objects of much greater importance.’³¹

The voyages that continued the search for the North West passage are reviewed in chronological order under seven headings using the names of their commanders and the dates of their commission.*

* The rank of the expeditionary leaders or commanders are not applied for this thesis since they alter frequently during the period. The names and any involvement of the commanders with British institutions where appropriate, have been used in recognition of their scientific commitment and expertise.

Section 2.1. *Captain John Ross. Expedition of 1818 - 1819.*

The first two naval expeditions during 1818 - 1819 had distinct but coordinated objectives.³² One was to explore Baffin's Bay and Davis Straights to report on 'the present state of uncertainty with regards to the movement of ice and the imperfect knowledge we have of the western side of Greenland.'³³ The other was ordered to survey ice fields on the coast of Spitzbergen which Scoresby reported had reduced by fourteen thousand square miles in area.

The expedition led by John Ross R.N. in H.M.S. *Isabella* and H.M.S. *Alexander* to Baffin's Bay, Davis Straights, and Lancaster Sound made many coastal profiles and undertook hydrographic measurements. Ross's ship inventory included the published accounts of Cook's second voyage, Crantz's *History of Greenland* and William Scoresby's *Arctic Regions*. Ross produced the mandatory written account as well as sketches and coloured drawings, even though he had a well trained artist Henry E. Hoppner on board. This officer's abilities were described in the official Admiralty instructions in 1818 as having 'skill in drawing is represented to be so considerable to supersede the necessity of appointing a professional draughtsman.'³⁴

Edward Sabine F.R.S. (1788 – 1883) of the Royal Artillery, 'well skilled in astronomy, natural history and various branches of

knowledge' was sent by the Royal Society to make pendulum experiments in order to help construct an exact shape for the earth. He also took many observations involving both magnetism and the possible link with Arctic meteorology.³⁵ This voyage was intended to be an investigation of the western end of Baffin's Bay given that, 'in the present state of uncertainty with regards to the movement of the ice and with the very imperfect knowledge of the Davis's Strait, and still more the seas beyond it, no specific instructions can be given for your guidance.'³⁶

Ross decided to make his own sketches for his eventual publication using a naïve style with generous use of colour. William Ivens comments that to most engravers at this time anything which seemed unreasonable or unclear was suspect, and that, as a direct result, their responsibility for pictorial statements was to reduce them to a dull flat plane of reasonability.³⁷ In Ross's case however the engravings in his voyage account are both forceful and dramatic.

In the *Passage through the Ice. June 16th Lat 70 44N.* (**Fig 1.13**) the expedition, accompanied by whaling ships, is sailing towards the artist. It conveys the idea of distances between icebergs and the scale of the pointed structures leaning precariously over them. They are sailing easily in an open sea but the jagged iceberg shapes make clear

that the expedition would meet ice in dangerous quantities on the chosen course.

John Ross's *A Remarkable Iceberg. June 17th. Lat 70 45' North.*

(**Fig 1.14**) shows an iceberg estimated to be 800 feet high, based upon the mast height of his own vessel. There are no explanations for the dark streaks shown on the weather side of the berg, or measurements for its circumference. Later on this voyage Ross includes another illustration again entitled, *A Remarkable Iceberg. June 25th. Lat 74.65' N.* (**Fig 1.15**). This demonstrates the size and stability of this ice monolith showing the sailors standing inside a natural arch silhouetted against the red tinged sky. Their ship is included to indicate scale. The arch and those weather conditions that could have combined to produce it are not explained and the narrative only speculates upon the size. These illustrations fall somewhat outside the required precision and objectivity giving sufficient detail and explanation for such unusual structures. Both pieces of work appear to have been made as if for the theatre, consistent with Phillip Edwards' observation that,

'In the voyage narratives we are the audience in a kind of theatre, a theatre of writing. We are watching events being written for an audience: the Lords of the Admiralty perhaps and the reading

public.’³⁸

In *Crimson Cliffs. A View of Coloured Snow. Lat 76 25' N. (Fig 1.16)* there is more scientific examination of the cliffs which have an ‘appearance both novel and interesting.’ The red snow is placed under a microscope and the possible causes of the strange crimson colour debated with the conclusion that this was not the work of marine animals or birds. The aquatint of the eight mile long coastline dominated by harsh red colour does not artistically convey the report that it was ‘remarkable in beauty and strangeness.’ Without the ‘delicate fugacity’ described it fails to provide credible support for the voyage record and evidences little value for any scientific support.³⁹ This phenomena was better described within the account appendices and was attributed as a *Genus Oredo*, substantiated later by Bauer as ‘originating and generating itself in snow.’ Ross produced his illustrated evidence primarily because of the colour but the eventual quality of the engraving caused amusement, criticism, and ridicule amongst the press and the public.⁴⁰ Frederick William Beechey’s watercolour, *Expedition beset in the Ice off Red Hill June 14th 1818*, (**Fig. 2.2**) might have shown the same red snow seen on Spitzbergen, thought to be caused by droppings from the Little Auk.⁴¹ Beechey however chose not to use colour for the engraving from his

watercolour, when this was later published in 1843.

The public may have been unaware of any colour in this landscape of the Arctic which was supposed to be uniformly white. Ross underestimated both the Admiralty and the public reactions to the strong colours he used and his personal interpretation. He departed from the precise, restrained, and mostly conventional watercolour sketches of the type required by naval officers such as such Frederick Beechey. The colour process was also mostly dependent on the printer's skill, with less subtlety and understanding of the subject than might have been necessary. Later Ross admitted his limitations connected with such subject matter when sketching for his second expedition with a narrative entry for 25th December, 1829, describing the northern sky, 'where the colouring of the sky was most various and splendid,' and, 'it is a fitter subject for painting than that of description, if indeed it was in the limits of art.'⁴²

The application of colour to sketched material, even when less confidently than Ross enacted, was not generally thought necessary to expedition records which primarily had to be scientific and factual. In *Cape Melville and Melville's Monument. Lat. 75 58' N. (Fig 1.17)* rather than complying with naval standards for coastal profiles, Ross prefers to apply red and brown in sharp contrast to a 'very high snowy

white mountain at the summit of an immense barrier of ice which led down to a lofty promontory. This Cape I named Cape Melville.’⁴³ The view is interesting but lacks a definition for such unusual geology. It is also less precise than would be needed for an accurate profile of this piece of coast to a navigator. The picture suggests that Ross wanted to employ the Cape to commemorate Lord Melville, a senior Admiralty figure, for personal reasons, and for his own credit.

The voyage of 1818 - 1819 used an approach to the visual record for expeditions that was then unorthodox. Ross selected subjects that clearly dramatised some events and the coastal geography, and several showing his close interest in the West Greenland natives. His account of this region is more generous in detailed observation than his orders had intended, or anticipated. He was criticised by John Barrow who wrote that ‘his reports had contained marvellous stories to disgust or confound or make the ignorant stare. Representations of objects, the mere fancies of the brain.’⁴⁴

John Ross the artist, compared to the clear, considered, and usually ‘classifying’ content of his authorship that Barbara Maria Stafford suggests was ‘meticulous, and distinguished,’ could write in detail about ‘a pleiad of specific characters possible to frozen matter; bergs, fields, patches, streams, loose ice and sailing ice brash ice, cakes and

hummocks,' but did not choose to illustrate these as proof. Even some new coastal sections drawn as profiles following Admiralty instructions were suspect.⁴⁵ A serious mistake was made with two profiles, *Sir George Hope's Monument and Land on the North Side of Lancaster Bay August 30th 1818*, (**Fig 1.18**) and *Croker Mountains and Cape Osborne. Lat 74 03' N.* (**Fig 1.19**) both profiles indicate no navigable route beyond Lancaster Sound to the north, or to the west.⁴⁶

The sketches by Ross show land and ice covered mountains which were actually cloud formations with thick fog lying over pack ice below. His mistake and decision not to explore further in either direction was unsupported by opinions from his junior officers, including and Edward Sabine.⁴⁷ Lieutenant Henry Hoppner R.N. on H.M.S. *Alexander*, the voyage artist appointed by the Admiralty, did not produce his own record of these coasts and could not contradict his superior when, in a statement in the log, Ross remarks that he is 'perfectly satisfied that there was no passage in either direction nor any harbour into which I could enter for the purpose of making magnetic observations.' Having made this mistake, which Scoresby and O'Reilly previously warned sailors to be ready for, he discontinued the course westwards and explored the open water around the North Western coast of Greenland. In this region he

produced sketches of new birds, animals such as the Musk Ox and some native Eskimaux, whom, arbitrarily as a Scotsman, he decided to call 'Arctic Highlanders.' Reliable tidal information and water temperatures were obtained for these parts of Baffin's Bay which was commercially beneficial to the British whaling fleet, but not regarded by the Admiralty as important in terms of his commission. In his report of the voyage, subjects of greater interest to the navy such as compass reactions to the *aurora borealis* were not completed (by Sabine) because, 'we were not ever in fixed position where we could use the electro magnetometer.' This despite the importance of observing all subjects of meteorology and magnetism in their Admiralty instructions.

The aquatint, *A Bear plunging into the Sea* (**Fig 1.20**) from a sketch by Ross is his eyewitness report of another occasion that was an event for the crew but only adds to the overall impression of trivialisation and sensationalism so heavily disapproved of by John Barrow. The subject matter may have been his attempt to find more points of 'interest' above all else.⁴⁸ Distinguishing between what was significant and what was peripheral for the Admiralty was never straightforward for naval artists. As their training was intended to deliver clear and precise coastal profiles, new subjects were not necessarily within their

capabilities. Some were capable of botanical drawings with exactness, and had equal skills for animal and bird subjects. Others chose not to produce work beyond their competence even if it could generate public interest. Failure of judgement over material submitted risked criticism from both the Admiralty and the Royal Society who unwittingly restricted the choice of subjects attempted or selected. John Barrow's critical essay condemning the first Ross expedition was largely aimed at the illustrative content which he declared had made the voyage seem like a 'pleasure cruise'.⁴⁹ Despite the heavy criticism a number of illustrations in his account demonstrate the style and manner expected in the visual account. Taken from the profile sketched by Andrew Skene R.N. 1796 - 1849, a midshipman artist, the West Greenland coast is shown, *Island of Disco and Icebergs*. (**Fig 1.21**) in an aquatint showing H.M.S. *Isabella* in front of a rocky promontory. A square sided iceberg is grounded near to the shore over which the sky has tinges of lightly reflected colour on a calm sea. This is an evocative record which delineates the snow covered mainland mountains and the island called *Disco*. It complies fully with Admiralty rules against 'embellishments and distraction from essentials in record keeping'.⁵⁰

Following negative official reaction both to the first reports by Ross

and his voyage account, the expedition became a subject for satirical cartoons, a pantomime, and scenes in a panorama production and critical articles written by the press. Such a reception possibly gave a greater restraint to the work prepared by artists sent on later voyages. Their concern for topographical, meteorological or navigational accuracy is matched by most sketched material set in the context of the written account. The first voyage of William Edward Parry R.N. 1770 – 1855, which left one year after the return of Ross in 1819, returned with a studiously careful presentation of the ice and its overriding importance to the success of future exploration for the North West passage.

Section 2.2. William Edward Parry. *The first Expedition*

1819 -1820.

The selection of officers and crews by the Admiralty for this naval expedition in H.M.S. *Hecla* and H.M.S. *Griper* was based on their experience, competence and certainty that they would provide an unequivocally objective record of the voyage that would irrevocably prove the value of the scientific and territorial discoveries in the Arctic. A quest costing much taxpayers money that needed to be placed positively in the mind of the British public.⁵¹ Frederick William Beechey R.N. (1796 – 1856), was chosen as one officer who combined Arctic experience with skill as an artist demonstrated on the expedition he accompanied to Spitzbergen in 1818. Henry Hoppner R.N. (1795 –1833), who had joined John Ross but underemployed as an artist, was also included.⁵² Edward Parry the expedition leader, was accompanied by Edward Sabine F.R.S, (1788 – 1883), on the recommendation of the Royal Society as astronomer, meteorologist and naturalist*. The expedition was to be a major hydrographical, geographical, geological and meteorological investigation survey starting at the position in Lancaster Sound at which Ross had given

* Sabines reputation was not damaged as a result of the John Ross Expedition Account. He was chosen for many Polar scientific commissions and was appointed one of three scientific advisers to the Admiralty in 1828.

up. It was ordered to establish whether the Croker Mountains existed and prevented navigation further west.⁵³

This expedition entered Lancaster Sound, went through the Barrow Strait, discovered the Wellington Channel, Prince Regent Inlet, and a large island they named North Somerset. The map of the route (**Fig 1.22**), shows the astonishing distance gained finally reaching Cape Providence on Melville Island close to what became Banks Island scarcely five hundred miles from the Bering Straits and the Pacific Ocean. This part of the voyage took only four months. The frontispiece of the published account shows the preparations they made for the safety of the expedition vessels amongst winter ice. *The Crews of H.M.S. Hecla and Griper cutting into Winter Harbour. September. 26th 1819. (Fig 1.23) See Fig 1.22 Red Dot 1.*

Beechey's sketch shows the sea ice being cut into sections to make a wide canal and the crews sailing these down the canal to the sea.

Fishing through the ice, shooting birds and hunting establish the needed for extra food for the long winter ahead and how even in this remote place self sufficiency and survival was possible. The ice does not appear to be strong, the slabs appearing only inches thick, but the canal length was four thousand yards, about two and one third miles, taking the ships four and a half hours to navigate. This exercise was

completed in one day.⁵⁴ Beechey and the engraver William Westall, 1781 - 1850, show the strenuous efforts of the men with ice saws making the canal, the novel idea of sailing the sawn ice sections down the canal and other activities occupying the crew; it identifies Edward Parry amongst officers in the foreground. For the engraving *H.M. Ships Hecla and Gripe blocked up with Ice* and *H.M. Ships Hecla and Griper in Winter Harbour*. (**Fig 1.24 a & 124 b**). Westall brings the ships closer to the viewer than in the original. He increases the area of the sky which is full of stars and suffused with distant light of the *aurora borealis* described in Parry's log for the 20th September, 1819, 'a permanent brightness in the northern quarter of the heavens which was probably occasioned by the *aurora borealis*', and on the 20th October, 'nothing could exceed for the beauty of the sky to the South east and the South West at sunrise and sunset. A rich bluish purple surmounted by a deep arch of red both interestingly the one with the other.' From 8pm until midnight it was seen at its most brilliant and broke out in 'every part of the heavens.'⁵⁵

Sabine gives an exact description but admits it is 'difficult to compare the light produced by an *aurora* with that of a moon because the shadows are rendered faint and indistinct by reason of the general

diffusion of the *aurora*.^{*} The pale light resembles the combustion of phosphorous.’ The engraving has a sublime quality which reflects the tone of Parry’s description expressing the isolation and insignificance of his crews in this landscape. This is emphasized by the lone figure tending an open fire, used to thaw supplies of vinegar for hygiene on board ship, and an arctic fox crouching in the foreground. The narrative in the picture informs the reader about a new practice instituted by Parry for overwintering in the Arctic. The preparation of the two ships with lowered yards and decks covered by awnings are essential to security and insulation. The position of the vessels close to one another exposed in an empty landscape emphasizes the Arctic ‘otherness,’ yet simply reassures the audience that officers and crews have taken all precautions. The qualities shown by Beechey’s original compared to this engraving by Westall are succinctly summed up by Russell Potter as,

‘Beechey’s a sketch of some ships, Westall’s a luminous vision of an undiscovered country.’⁵⁶

The engraving contains elements expressing deep solitude, space, darkness, mystery and utter silence all infused with romantic meaning

^{*} The two auroras , borealis and australis, surround the north magnetic pole and the south magnetic pole respectively, and occur when highly charged electrons from the solar wind interact with elements in the earths atmosphere. The colour depends upon on the atoms struck and the altitude of the collision.

used by contemporary poets. The winter sky, an ‘abyss of space’ suggested by Anthony Ashley in *Characteristics* (1714) also represents ‘the seat of thy extensive being; of which no place is empty; no void which is not full.’⁵⁷ Hugh Blair within his *Lectures on Rhetoric and Belles Lettres*, (1738), argues that,

‘the firmament when filled with stars, scattered in such vast numbers, and with such magnificent profusion, strikes the imagination with a more awful grandeur, than when we view it enlightened by all the splendours of the sun. Obscurity we are further to remark, is not unfavourable to the sublime.’⁵⁸ Development of such a scene to a very high level of sublimity rests with its ‘simple beauty, and by simplicity to an adorned beauty, as opposed to the rational gratifications of ornamented beauty.’⁵⁹

Polar skies and the *aurora* especially, were important in the exact calibration and measurement for magnetic compasses so that in the voyage accounts these, when observed, are curiously and very unscientifically associated with an awareness of a Greater Being. Their frequent but inexplicable appearances and disappearances, variations in shape, position and colour are described and speculated upon.⁶⁰ Part of this spiritual connection and feeling are also present through the common use of phrases such as ‘death like,’ or ‘tomb like’

to describe the deep Arctic silence.⁶¹ This engraving supports that connection showing the *aurora* surrounded by unidentified universes where heaven could be ‘found above the stars,’ is commented upon by Arctic explorers from this time onwards.⁶²

As well as the appearance of the *aurora* the iceberg usually appears in the records as simulacra that puzzle and amaze because of their above and below water immensity. In *Situation of H.M.S. Griper and Hecla July 4th 1819*, (**Fig 1. 25a and 1.25b**) icebergs are approaching both the ships whilst they try to sail clear.⁶³

‘The ships bows were kept round to the northward only by the steerage way given to them by a heavy southerly swell, which, dashing the loose ice with tremendous force against the bergs, sometimes raised a white spray over the latter to the height of more than 100 feet and presented a scene at once so sublime and terrific.’⁶⁴

The detail of the iceberg in the foreground shows a fissured surface and its partial collapse on the right. By moving the ships further into the distance the proportions of the nearest berg in the engraving compares closely with descriptions given by the log which also describes the weather conditions.⁶⁵ The engraver concentrates on the movement of the swell and the breaking force against the waterline. The backwash and undertow caused by suction, is shown in a swirling

movement by the smaller ice floes. The proportions of the larger icebergs Parry calculates, was a depth under the sea of 110 fathoms, approximately 700 feet.⁶⁶

In his watercolour sketch Beechey and the engraving made by Westall, *Icebergs in Baffins Bay 20th July 1819*, (**Fig 1.26**) See **Fig 1.22 Red Dot 2**. two icebergs are shown as floating mountains.⁶⁷ They are marked out in great detail including snow covered and sunlit high peaks, areas of melt and fractures just above sea level, with signs of weathering on the sheer cliff faces. These complement a precise description in the narrative. The crews are in small boats trying to pull their ships away from destruction, one minute away, according to Parry's account. The clouds, suffused with light and the warmth of sunlight and radiance on the peaks of the iceberg, contrast sharply with the impending disaster shown below. This form of obvious paradox shown by the composition may in part be due to Westall's classical training and intense reaction to nature, as proposed by Findlay.⁶⁸ The effect of wind on icebergs was recognized and mentioned here, but the mass above water Cook proposed suggested that these could, in the conditions, move as quickly as any sailing ship. This being an explanation for the *Griper* using the efforts of the sailors as well as her sails.⁶⁹

Another engraving showing icebergs is, *Situation of HM Ships Hecla and Griper the 20th September 1819.* (**Fig. 1.27 b**) this based upon a watercolour by Beechey.(**Fig 1.27 a**). The deep swell on the sea around the ships has pushed them amongst broken pieces of floe ice and a dangerous position. The narrative describes how *Griper* was heeled over with only seven feet of water underneath, whilst *Hecla* in the right hand foreground, was beset and under increasing ice pressure. Parry saw that if one ship was secured he could release its crew to help the other; a course of action which proved successful. He remarks that having released the ships on this date he ‘saw the expediency of seeking a winter harbour, ‘followed by a note that, ‘the entire landscape was covered by snow which remained so during the entire winter.’

The ships previously surrounded by increasing pack ice were forced inshore to find grounded ice floes as some protection. In *Situation of H.M. Ships Hecla and Griper from the 17th to the 23rd August 1820.* (**Fig 1.28**) See **Fig 1.22. Red Dot 3.** the position of Hoppner is facing towards to the ships below lying apparently secure in their natural ice harbour. The sky is full of sunlight and small clouds whilst the pack ice shows a considerable brilliance off the sun across an extensive ice field.Parry writes that the conditions were in reality more deceptive

than the engraving shows.

‘Some heavy pieces of the grounded ice to which our bow hawser was secured fell off into the water, snapping the rope in two without injuring the ship. Every event of this kind must materially alter the centre of gravity of the whole mass which already appeared in a tottering state. One of those enormous masses falling upon her deck must inevitably crush or sink her and I thought it prudent to move the *Heccla* out of her harbour to a place where the *Griper* was lying.’⁷⁰

This explanation from the account confirmed how refuges taken in ice for protection could quickly become deadly traps. A form of dichotomy which James Cook had encountered and described in his Antarctica voyage amongst the ice islands. Polar explorers held to the view that sea ice was a strangely malevolent substance although Hoppner shows the audience only the size and shape of the unstable iceberg without the concerns held by Parry. He makes clear that with both ships set fast in this ice field, there was no possibility of either rescue or escape.

Ten engravings were selected for this voyage account. Two are illustrations of the ships in winter harbour, and three of icebergs or ice floes. Three are concerned with coastal profiles and geographical

features. Only two include Esquimaux.⁺ Parry makes clear his intention in his introduction that selection was based on the ‘interest and entertainment they might afford’ but that in making choices for the published material, these were clearly to reflect the complete success of the voyage and scientific studies by Edward Sabine. Three subjects selected showing seabirds and moose, these from more than thirty sketches and watercolours by Beechey and Hoppner.

The engravings chosen represent ice with respect and as a powerful natural phenomena charged with unusual beauty and strength. The paintings of the landscape and new channels explored, the geological discoveries and the clear night skies full of galaxies, are all relevant and appropriate to the orders given to this expedition. They appear to support Parry’s expressed opinion that a North West passage would be discovered and would be useful. This account was praised by John Barrow and proposed as a model for others to follow.⁷¹

The choice of William Westall for the adaptation and engraving process, one biographer comments, ‘made possession of this land all the more attractive.’⁷² The remote scenery of the Arctic appears to have stimulated new ideas concerning certain aspects of this region as

⁺ The use of the word Eskimaux or by Americans, Eskimos, is used to for all the aboriginal first inhabitants of the Arctic regions of Canada, Greenland and the USA and was commonly adopted in the early 19th century voyage accounts. The Canadian Constitution Act, (1982) finally accepted the Inuit as a distinctive group of Aboriginal Canadians from the Nunavut, NunatuKavaut and Inuktitut regions. CMC Reference

a new treatment for the sublime. This added a separate and different dimension to those practical representations which Beechey's originals had been intended. Westall's draughtsmanship was further helped by his experience in new techniques of engraving which allowed him to keep the detail of the original work and still improve upon its impact and emotional intensity. Only two of his engravings, straightforward coastal profiles, do not show his ability in this manner.⁷³ In *A Review of the Landscape, a Didactic Poem*. (1795) William Marshall summed up elements of the sublime 'that seem to require that the higher degrees of astonishment should be roused, to demonstrate its presence; a degree of terror, if not of horror, is required to produce the more forcible emotions of the mind, which sublimity is capable of exciting.'⁷⁴

The achievement of Edward Parry was in reaching 110 Degrees of Longitude to the west by tenacity, careful preparation, and luck due to much reduced sea ice in Lancaster Sound in the summer of 1819. The Board of the Admiralty, John Barrow now a Baronet, and the British Parliament expressed complete satisfaction with his work and awarded him and his crew a large financial reward..⁷⁵ This account was praised for an objectivity, restraint of language, a detailed scientific record with observations by Sabine, and commended the enthusiasm of

Parry's determination to complete the North West Passage in the future.⁷⁶

Section 2.3. *William Edward Parry. The Second and Third Expeditions of 1821-1823 and 18 24-1825.*

The success of his first expedition led to two successive commissions for Parry from the Admiralty to complete a route for the North West passage by travelling through the far north western side of Hudson's Bay, or through the Prince Regent Inlet running south from Barrow's Straits. The map of the first voyage is given in **Fig 1.29. Red Line.**

The first expedition on H.M.S. *Hecla* and H.M.S. *Fury* 1821 – 1823, was planned to remain in the ice over one winter. The second in command and voyage artist was George Lyon R.N. (1795 -1832).

Lyon willingly 'seized on every opportunity to exercise his pencil at my (Parry's) suggestion' and, despite a monotonous and uneventful voyage was 'always willing to follow suggestions for subject matter.'

His drawings are those of the trained naval artist appreciably less natural and sensitive than Beechey's style. Lyon's work was supplemented by sketches from Henry Hoppner, R.N. the experienced officer and artist who Parry and Ross had taken with them before. The engraver employed was Edward Finden, 'with whose abilities as an artist the public is already well acquainted,' and a regular choice of the Admiralty for their expedition accounts. His technique, used both for his popular prints of Gainsboroughs' *Harvest Wagon* and *Passes of the*

Alps is described by Brockendon when applied for book illustrations ‘An elaborate finish with great precision which led some people to describe the work as ‘cold.’⁷⁷ For his accuracy, objectivity and demonstrable capability with snow and ice in engravings of Alpine views, he was clearly suitable for the Admiralty requirements.

A list of scientific instruments assembled for both voyages are described by Reverend Fisher, a geographer in charge of specific instruments for the Royal Society.⁷⁸ One vital scientific task for the expeditions was finding the exact position, extent and strength of the *aurora borealis* and its profound effect on types of ship compasses. The *parhelion* and *parheliae* also sketched by Bernard O’Reilly, were to be measured for identical reasons.*

As a frontispiece of his second voyage account, Parry chose to replicate a scene from his first voyage. *Situation of H.M. Ships Fury and Hecla at Igloolie 1822 - 1823. (Fig 1.30) See Fig 1.29. Red Dot 3.* His two ships are again surrounded by ice reaching to the distant horizon with a sky merging into a hazy landscape beyond a misty middle ground. A game of cricket played on the ice is being watched by officers and a clearly marked path between the ships is marked by

* Scoresby describes these as ‘circles in rainbow colours surrounding the sun or in some cases versions of the same in smaller circles or arcs of coloured light centred on the circumference of the sun.’ *An Account of the Arctic Regions*. Vol 1.Sect 5 p392

ice cairns with ropes, are the main points of interest. Parry selected the picture to illustrate the need to occupy his sailors during times of enforced waiting and also to warn in advance the reader that events or discoveries were restricted on this voyage by these poor conditions.

Held up in this place gave Lyon opportunities to sketch the snow huts, *Iglu*, made by the local Eskimaux. These are praised as practical and spacious and several sketches show details of their construction. Parry understood the advantages of their clothing, weapons for hunting, and fishing which they had evolved to suit conditions and with very limited natural resources. The sketches provide an appreciation of the speed with which an *Iglu* could be completed. *Eskimaux building a Snow Hut* .(**Fig 1.31**) shows work in progress with blocks of ice being laid. ‘Cutting from a drift of hard and compact snow a number of oblong slabs, six or seven inches thick and about two feet in length, laying them edgeways on a level spot in a circular form and of a diameter from eight to fifteen feet.’ He describes ‘a doorway in the form of a Gothic arch, three feet high and two and a half wide.’ The interior is bathed in a light both ‘soft and pleasant.’⁷⁹

Two sketches made at Winter Island, see **Fig 1.29. Red Dot 2** shows, *Eskimaux creeping into the passage of a Snow Hut*. (**Fig 1.32**) which is intended to show the design of its entrance and the pane of

transparent ice acting as a window. Both these features made a strong and favourable impression on Parry. In *Interior of a Snow Hut. Winter Island*. (**Fig 1.33**) the scene includes simple implements used for storing and preparing food with an Eskimaux woman holding a small child. In *Canoe of the Savage Islands*. (**Fig 1.34**), shows a variety of light single canoes or *kayak*, and the much bigger canoe called an *oomiack* crewed by six women and four men fishing as a group. Parry comments on the unusual equality between the different sexes in this group and makes efforts to learn their dialect. He considers that a number of lessons should be learnt from Eskimaux, useful for any stranded naval crews. The native practices are treated in a serious and positive manner with full appreciation of *Iglu* snow huts as quickly built, practical, and well insulated shelters. Clear recognition is made in this account to the ability of these local aboriginal people used to the frozen regions and able to survive indefinitely.

Although Parry sees the *aurora borealis* as, ‘the most perfect bridge-like form I ever saw’ there are no engravings of this event. The readings of electromagnetic strengths were taken and logged on different compasses as directed, but no visual account is made showing the position and appearance of the *aurora* from the northern end of Hudson’s Bay. Lyon may not have been capable of sketching or

colouring this ephemeral spectacle. A difficult subject even for a modern camera using multiple exposures. **See Appendix 3.**

The subject *Cutting into Winter Island. Oct 1821. (Fig 1.35)* resembles the engraving with the same title by William Westall during the Parry's first voyage (**Fig 1.23**). Lyon for his study draws the ships in the ice canal proceeding into the shoreline and safety. The low hills on the coastline of Winter Island can be seen. The urgency and effort needed from the sailors heaving one ship up the canal is examined along with sailors on cracking and unsafe summer ice carrying ice saws and one sailor who has fallen through. A deer is being hunted for winter food.

‘The average thickness was only 3 1/4 inches and it (the ice) had a waving motion under the feet like that of leather or any other tough flexible substance set afloat, a property which I believe is peculiar to salt water ice.’⁸⁰

Parry writes that a ‘squeezing of young floes took place on the 12th December. It makes a noise resembling a heavy wagon labouring over a deep gravelly road.’ more optimistically he then adds, ‘they had snow piled up around the ships and also on deck to retain the warmth below in the ship. It seemed to perform very effectually.’ Parry expresses a satisfaction from the knowledge that ‘over wintering was no longer an

experiment. Our comforts were greatly increased', this despite temperatures of – 40 F. Degrees recorded on January 20th 1821, the coldest night of that winter.

The summary in this voyage narrative about the results of the expedition are still optimistic but reflect that the attainment of the North West passage by this route was unlikely. Parry had explored Hudson's Bay, from the Wager Inlet up to the Hooper Inlet at the top of the Melville Peninsula, and had overwintered twice without loss of life. He returned with new magnetic measurements as well as coastal charts. His sustained contact with Eskimaux groups had provided useful information on their ways of sustaining health, through eating fish oils, the eye protection from ice glare, practical means of travel over ice, and sources of edible meat from wild animals. The materials chosen and the construction of light and transportable canoes and sledges drawn by dogs, all learnt from their practices and successful Arctic travel were undervalued by future British expeditions.

The consequence of their enforced stay was to allow a better pictorial account of the uses of snow and ice and practical survival methods for exploration that demonstrably worked with conditions, and not against them. Parry wrote that from this second voyage he had learnt a lot about the ice, wind, and patience.⁸¹

The *New Monthly Magazine* took a despondent view of the results nonetheless. ‘This expedition has in fact neither added much to geography nor been able to explore farther than was done by Middleton and preceding Navigators.’⁸² Barrow more positively, wrote that ‘knowledge endureth for ever and the names of Cook, Parry and Franklin and a host of others who have contributed so amply to enlarge the sphere of knowledge will shed a lustre on our naval history and stimulate the youth of ages yet to come to imitate their bright example.’ The question asked by the press and the public was why Parry had not returned to the area of his successful first voyage instead of exploring this new route to the south. This ignored the observation that the sea beyond Cape Providence on Melville Island, (**See Fig 1.22 Red Dot 5**) was full of pack ice as high as forty feet in places.

The Admiralty view was that one unexamined route through Lancaster Sound remained to be explored. The Prince Regent Inlet, identified from Parry’s first expedition, might lead through to an open sea west and south of the Melville Peninsula and Cockburn Island. Parry was ordered to return to ‘force’ his way through this section during the three summer months. Henry Hoppner R.N. was to command H.M.S. *Fury* and Edward Parry R.N. H.M.S. *Hecla*. The sketches were once more by Hoppner with a few from Horatio Nelson

Head R.N., a young midshipman, The ships were in Baffin's Bay in the early summer of 1824. A map shows their route into Lancaster Sound (**Fig 1.29**). **See Blue line.**

This expedition into Prince Regent Inlet leading south out of Lancaster Sound met heavy ice conditions during the first summer. It took three weeks to make seventy miles progress westwards with ice floes as high as 20 feet in mid August and by late September it had closed in completely. The ships wintered in Port Bowen on the north side of Barrow's Strait until July 20th 1825.(**Fig 1.29**) **Blue Dot 4.**

During this winter Parry writes,

‘when here the earth is once covered, all is dreary monotonous whiteness - not merely for days and weeks but for more than half a year together. Whichever way the eye is turned, it meets a picture calculated to impress upon the mind an idea of inanimate stillness, of that motionless torpor with which our feelings have nothing congenial; of anything, in short, but life. In the very silence there is a deadness with which a human spectator seems out of keeping.’⁸³

Parry instituted regular instruction for his men in Christian theology and ordered that all his officers should consider themselves responsible for ‘religious feeling so essentially improving the character of Seamen.’ A mood is noticeable in his writing of his

despair at ever finding ways out to open water but a certainty also that divine intervention would assist them.

On July 30th wind forced *Hecla* and *Fury* towards the coast (**Fig 1.29**)

Blue Dot 5, large pieces of drifting ice pushed them onshore. Three

sketches were made of subsequent dramatic events. *Heaving down the*

Fury. 18th August 1825. (**Fig 1.36**) by Horatio Head and *Situation of*

H.M. Ship Fury August 25th 1825.(**Fig 1.37**) by Hoppner. By the end

of August the landing of *Fury's* stores had been completed. *Landing*

the Fury's Stores. August 1825.(**Fig 1.38**) and her officers had decided

they would still have to lighten the ship. The lowered masts and yards,

and several tents on the shore indicate that the damaged *Fury* had been

beached for repairs. These sketches of the work to get ready and then

repair *Fury* were records to show in evidence at any Courts Martial

held later, that they had not sacrificed their ship needlessly. This was

the record of a shipwreck imposed on them slowly by ice which,

whilst grievous, was not a disaster since *Hecla* could take the all

Fury's crew on board. Parry was exonerated from losing his ship and

the quantity of stores left behind at Fury Beach, helped John Ross

survive one winter with his men in 1833 -34 after the loss of the

Victory.

Parry was convinced under the circumstances that;

‘such an accident was at all times to be expected than otherwise, and that the only real cause for wonder has been our long exemption from such a catastrophe’. He continues with ‘to make progress involves constant and unavoidable risk’ but that he had few doubts about the ultimate success in the search for the passage. But several members of the Admiralty, and a proportion of the British press, both before and after this voyage, expressed a greater lack of confidence.⁸⁴

The engravings from this account do not explain any of the specific research by Professor Barlow, J.D Hooker F.R.S., Professor Robert Jameson and Henry Foster F.R.S. Notes made by Jameson on Arctic geology from this expedition were sent to the Wernerian Society in Edinburgh to be read in a debate over Professor Buckland’s paper, *Remarks Tending to explain the Geological Theory of the Earth*.⁸⁵

Jameson’s report contained opinions based on new evidence in favour of the ‘ice age’ theory contrary to the biblically based great flood. This was based upon the geological formations and fossil remains he observed in the Arctic. This type of scientific work was of significance to the expeditions scientific worth and to the work of the newly formed Geological Society and the Royal Society, yet it merited no special mention in Parry’s narrative despite the international significance it represented. Results that were to be increasingly

relevant in the discussions about the evolution of the earth and its species, and as new expeditions returned with extensive fossil remains and rock samples from territory made accessible by sledge teams.

Parry's record is concentrated on the loss of the *Fury* with half the engravings in the published account related to this event. The subject used for the frontispiece, *Situation of H.M. Ships Hecla and Fury.*

August 1st 1825. (**Fig 1.39**) was drawn originally by Horatio Head.

The ships are set below a towering cliff face and are being lifted up by pressure from the pack ice. The engraving by Finden uses the two ships to illustrate the height of this cliff as well bringing out the depth of a sinister chasm or rift, running down its face. This scene defines the weathered geological strata at the shoreline into which there appears to exist an entrance to the underworld. Escape is clearly impossible from this place on the landward side. The ships are stranded and at the mercy of nature held between the relentless geology above and the hostile ice floes massing below.

Parry expresses his acute distress felt by all such sailors under similar circumstances, since the ship was their home and they were powerless to help it survive. A sketch by Hoppner explains the same sense of helplessness also created by ice.(**Fig 1.40**) *Sailing through Young Ice. September, 1824* .In the accompanying narrative Parry

observes, 'a vessel of whatever magnitude, or whatever strength, is little better than a nutshell when obliged to stand the pressure of the unyielding ground on one side, and a moving body of ice on the other.'⁸⁶ He had previously noted that 'it is scarcely possible to conceive the degree of hindrance occasioned by this impediment (young sea ice), trifling as it always appears before it is encountered. When the sheet has acquired a thickness of about half an inch, and is of considerable extent, a ship is liable to be stopped by it.... A ship in this helpless state her sails in vain expanded to a favourable breeze her ordinary resources failing, has often reminded me of Gulliver tied down by the feeble hands of Lilliputians.'⁸⁷

The reports given by him as commander together with the pictures chosen from his four expeditions, are all objective and provide evidence sufficient to meet his instructions. He makes consistent efforts to improve conditions for his men, in clothing, victualling and keeping morale high. The long isolation in harsh weather and gloomy surroundings created a despondency which may have discounted in his own mind the value of the scientific and geographical discoveries they made. He refers to the 'comfortless of the Arctic winter', 'hopeless prospects' and his conclusions over the powerful forces contained in ice floes 'even those only ten feet thick,' which can

weigh thousands of tons and ‘render the shell of a wooden ship nothing at all.’ Parry had from his first voyage, as the illustrations chosen show a confident and optimistic outlook on the search. By the end of third expedition he senses the futility of contending with forces of nature represented by ice floes. The loss of H.M.S. *Fury* was serious in his own estimation so that whilst he publicly supported John Barrow’s opinion that the third voyage, resulting in no loss of life, was worthwhile and reflected positively on the Royal Navy, he stated a wish not to make any further attempt to find the passage.

The British press were by now more convinced that if any sea route over the top of Canada was available and if the Polar ocean was as clear as Sir John Barrow insisted, why did Admiralty not explore in that direction? Parry agreed, under pressure from Barrow and his peers, to lead an expedition to find the North Pole using small boats designed to be sailed or dragged like sledges, over the ice.

Section 2.4. *William Edward Parry. Expedition to find the North Pole. 1827-1829.*

Parry was asked to lead an entirely different expedition to reach the North Pole starting from Spitzbergen. There is no record of the artist chosen to record this voyage. Although unsuccessful it reached Latitude 82 Degrees 45min North , higher than any previous expedition. At this point Parry calculated that the ice they were laboriously travelling over was moving south at 4mph; the same speed they could barely maintain going north. William Scoresby had recommended that sledges would be a more practical way to travel to the Pole his advice being that sledges should be light in order to move quickly pulled by men or teams of reindeer. Parry, because of Barrow's conviction that the North Pole would be surrounded by sea, was eventually persuaded to take heavy boats fitted with snow runners instead.

An engraving shows the expedition members spread out over ice and of open patches of water. Strenuous efforts are being made by sailors hauling the boats. *Travelling amongst Hummocks of Ice, July, 1827.*

(**Fig 1.41**). The account reads that the 'way led over nothing but small loose rugged masses of ice, separated by pools of water, obliging us constantly to launch and haul up the boats each of which

operations required them to be unloaded, and occupied nearly a quarter of an hour.' They were hauling boats over half melted ice 'composed on its upper surface of numberless irregular needle like crystals placed vertically, and close together called 'penknives,' by the men. The men likened some of the pieces ice to a 'stone masons yard with pieces ten times the normal size, and high irregular hummocks of ice - crowning floes'.⁸⁸

In an engraving *Boats hauled up for the night* (**Fig 1.42**) the expedition members are shown camping, drying clothes and fishing through the ice. The two boats have shelters made from canvas awnings which demonstrate how they also became sledges for travel over ice. The style of ice boats used later had sails and was lightly build for the naval search expeditions for Sir John Franklin in the 1850's, which proved effectively William Scoresby's advice published more than ten years earlier but still ignoring his wise advice to use dogs.⁸⁹

Parry after his valiant attempt to reach the North Pole, became dispirited and discouraged. He describes the region around the Pole using words such as, 'Dark and dismal solitude where all nature seems still and wrapt as it were in a deathlike gloom.'⁹⁰

His account and very limited pictorial record of the fourth journey are

reflective of a similar narrative by Cook during his cruises around Antarctica between 1772 -1775, stating the opinion that the North Pole was an empty, soulless, and dreary wilderness, and of as little value as its southern counterpart. Parry ends this narrative with the opinion that an open Polar sea could not exist, but this was denied publicly by Sir John Barrow who claimed that the ice conditions, and Parrys' snow blindness, had prevented the discovery of both the North Pole and the open Arctic sea.

The four expeditions led by Parry began with a highly regarded account of a voyage objectively and imaginatively illustrated by the combined work of Frederick Beechey and William Westall. In its detail it provided the scientific studies and the coastal profiling but also introduced a romantic and compelling trope by conveying a sensual loneliness and silence from the Arctic winter skies, sublime views of beautiful and terrible icebergs bathed in sunlight, and an absolute discontinuation of time.

During the second and third voyages the objectivity continued but in general treatment of ice conditions are less than favourable. The subject matter selected becomes less striking and both icebergs and the *aurora* as simple *motifs* are noticeably absent. Eskimaux societies and their ways of life do supply new interest but the sketches by

Hoppner and Lyon provide only the essential detail of their customs and habits with little personal or emotional content. The work is constrained by Admiralty rules although the written account by Parry and Lyon reveals their admiration and surprise at the practicality of Eskimaux ways. Finden's engravings reflect sadly an impersonal, almost disengaged quality in this subject matter. Henry Hoppner, who was sent on three of these four voyages becomes, unsurprisingly perhaps, repetitive in choices of subject matter or else could find no new source material that varied from the endless whiteness and dull uniformity in the scenery.

For the fourth expedition towards the North Pole no naval artist was appointed suggesting that the repetitious nature in the potential visual record for these journeys was accepted, and no longer warranted the commission of a trained eye. The use of ice boats for the first time was the point of main difference but nothing fresh was discovered from the ice near to the Pole except the unexpected drift southwards and its seemingly limitless horizons without any open sea.

Picture material from each of Parry's four expeditions creates a picture of a series of conscientious scientific investigations, but results in relation to the ice that show very little in terms of protection for their ships or even theories to help pre determine its movements. The

work does not help establish any direct causes for the atmospheric conditions over ice nor those seasonal variations and thicknesses that might be expected. The record is essentially one of heroic contest between ships, their crews and the ice, especially periods of extreme danger such as the slow shipwreck of the *Fury* and the ‘providential’ escape of her crew. The initial confidence that the discovery of a North West passage could be achieved quickly diminishes with the later published accounts as did much of the public support for the exploration over the ten year period. The second voyage of John Ross was, however, to establish a shift in opinion once more favourable to the enterprise and its cost by both the British public and media.

Section 2.5. *John Ross and his 'residency' in the Arctic Regions. 1829 - 1833.*

The return of Parry coincided with preparations for a new expedition led by John Ross to find the passage. This expedition was a privately sponsored expedition mounted without government money or Admiralty support. It left in 1829 not returning until 1834 after four years trapped in the ice.

Because it was a privately sponsored voyage the preferred subject matter and limitations on presentation imposed by the Admiralty did not apply.⁹¹ Ross wished to redeem his reputation over the mistaken identity of the Croker Mountains in 1819 that were known by now not to exist. He determined upon equipping an expedition ship, the *Victory* and search down the Prince Regent Inlet for navigable ice free water beyond that point reached by Edward Parry in 1824 and 1825.

In his foreword to the published account Ross acknowledges Scoresby and his practical advice, and includes the same list of descriptions and technical references to the types of ice which Scoresby had first identified.⁹² This expedition record is a more personal account, less orthodox than an Admiralty publication. Some illustrations were sketched or painted by Ross and were hand coloured. The black and white lithographs made from other sketches,

were by John Brandard, Edward Finden, John Cousens, William Chevalier, and William Say. The collected reputation and skill of these engravers was employed to ensure that individual plates could be sold to produce additional income for Ross.

The expeditionary record contains a total of sixteen coloured and black and white plates. The line drawings and narration in the appendices include scientific reports written by Commander James C. Ross, his nephew, on subjects such as light refraction, the magnetic pole, compass variations at various locations and local maps for coastlines and their hinterlands. The naive style used for the drawings John Ross made during his first expedition is once again evident. Colour is used extensively for *Victory in Felix Harbour* (**Fig 1.43**) showing the winter night sky with a multiplicity of stars. Ross writes, ‘Venus a spectacle which was naturally contemplated as in harmony for the rest of the day.’

When describing events on Christmas Day 1829 he continues, ‘the colouring of the sky was most various and splendid; being a fitter subject of painting than of description if it was indeed within the limits of art.’⁹³

The display of flags which he writes ‘was a matter of course.’ deliberately courted national pride in his expedition which he claimed

had reached the edge of the explored world, ‘closer to heaven than to the rest of humanity.’ He insisted that the situation was now one in which ‘our humble endeavours depend upon Divine Providence.’⁹⁴

Ross employs strong colour again in the watercolour *North Hendon. Snow Cottages of the Boothians*. (**Fig 1.44**). The contrast of the snow huts which ‘had just been built in a small bight on the shore about 2 ½ miles from the ship, ‘stand out against a hill and the dark reddish and purple sky used in the background.’ The interest Ross has for these ‘cottages’, an direct reference to the derided description he used earlier of Eskimaux as ‘Arctic Highlanders’, is his comment that ‘no two appear the same’ and the illustration shows a group of organically round shapes interconnected to each other. The meeting with these Eskimaux who were friendly, enabled him to self righteously claim that, in Boothia Felix, ‘the natives laid down their weapons for him.’⁹⁵ It is uncertain from any of the reliable and factual accounts written by Parry whether these or any tribes of Eskimaux, possessed weapons other than hunting spears and harpoons. Ross’s relationship with Eskimaux are further explained in Chapter 2.

The success of this voyage was limited. One pioneering sledge journey was made to the northern extent of Boothia Felix named after their main sponsor.⁹⁶ Another south to the coast of Canada and close to

areas mapped by John Franklin on his overland expedition in 1822. They reached a part of King William Land opposite the Fury and Hecla Strait **See Fig 1.29** not part of Canada as Ross claimed, due to confusion once more caused the frozen sea, which, at a distance, resembled snow covered land and because ‘everything was indistinguishable, dazzlingly white.’ James Clark Ross, his second in command, discovered the position of the northern magnetic Pole long sought by navigators and scientists. Its precise position was not permanent and the discovery therefore had limited value. In Britain the public confused this location with the geographical Pole, the remote but desirable and romantic *locus* at top of the world made notorious by writers and philosophers. The magnetic Pole aroused considerable scientific interest internationally which provided the expedition with more helpful publicity.

Success so far as the British public were concerned, lay chiefly in the survival of the crew during four hard Arctic winters and their remarkable rescue after the abandonment of the *Victory* by the *Isabella*, a whaling ship which had been commanded by Ross on his first voyage in 1818-1819. It was a ‘miraculous deliverance’ and was recorded in a coloured engraving *The Victory’s Crew saved by the Isabella*, (**Fig 1. 45**). The event was also included as part of the setting

for large panoramas and other exhibitions celebrating the expedition.

These are described in Chapter 2.

The crew had survived as if, ‘wonderfully protected,’ and as Ross admitted when describing his rescue, it was due to ‘a wonderful chain of Providential circumstances.’⁹⁷ The picture produced by Ross includes seabirds and a walrus arranged on ice floes like the enthusiastic audiences he aimed for later, witnessing and celebrating his lucky escape.

Ross commented later upon the Arctic scenery repeating quite similar opinions like those of Edward Parry adding that, in his judgement solely as an artist, the ice constituted,

‘an evil to balance against all this (a sometimes refreshing portion of a general landscape) that it deforms all landscape. Destroys all keeping by confounding distances and with that proportions and with that, too, more and worse than all else, the harmony of colouring giving us a motley patchwork of black and white in place of those sweet gradations and combinations of colour which nature produces in her summer mood, even amongst the most deformed and harsh of landscapes.’⁹⁸

He employed new methods for making his sketches or ‘true delineations.’ One such method was the sixty six inch telescope, and

another 'Mr. Ronald's perspective instrument.' It is not explained in the text what this achieved yet the devices he admits did not alter that ability he had or help him 'possess such talent in that art as could embellish the scenery were it even more favourable.' He concludes with a rhetorical question, 'is there anyone who loves the sight of ice and snow? I imagine now, that I always doubted this. I am quite sure of it at present.'

The published version of this account had a list of 7000 subscribers even at the high price of 2 and 1/2 guineas a copy. The voyage account, free of Admiralty censorship, contained a degree of speculative geography and some controversial facts which did not escape criticism from government sources. The newspaper articles explaining these discoveries expressed such a large and genuine public relief over his miraculous escape they were conducive to restoring Ross's professional reputation. Public interest was stimulated by this expedition and was strong enough to allow the Admiralty and Government to launch the next voyage. John Ross and his 'residency' proved that it was possible to remain in the Arctic ice for an extended period. The engagement with Eskimaux in his account also helped the indigenous peoples to occupy a regular and more persuasive place in future exploration narratives. Not just as subjects of anthropological

examination but as individuals with tangible values as guides,
collaborators and especially experts in ice conditions.

Section 3. Naval expeditions through Canada to the Coast of the Arctic Ocean; 1819 -1822 and 1825 – 1826.

The two expeditions which established John Franklin's reputation as a determined Arctic explorer were scientific and well represented by members of the Royal Society. The Hudson's Bay Company were also involved because of their commercial trading interests in the region. The point for the Admiralty in the land expeditions was to increase the extent of knowledge about ice and the suitability of harbours or other safe anchorages in conjunction with the voyages commanded by Edward Parry. They were intended primarily to discover what sea routes existed to the south and west of Parry's commissions.

The expedition by George Back in 1825 -1826 was unscientific in purpose initially but a searching party for the missing *Victory* and its commander John Ross. The return of Ross, unexpectedly, meant that Back was given extra resources by the Geographical Society of London and the Royal Society to continue the work of discovering and recording new territory to the east of Franklins previous two routes.

Section 3.1. *John Franklin. Two expeditions through Canada to the coast of the Arctic Ocean. 1819 -1822 and 1825 -1826.*

Two British explorers had travelled as far as the arctic Canadian coast using river transport. Samuel Hearne in 1772 and Alexander Mackenzie in 1793, whose separate accounts were both considered incomplete and unreliable by John Barrow. An initial overland expedition under the command of John Franklin R.N. (1786 – 1847), was sent to map in detail the Arctic coastline of Canada. This expedition included George Back R.N.(1796 – 1878), a painter and ambitious junior officer.⁹⁹ The route of the first expedition is shown on the map, (**Fig 1. 46**).

The accounts written by Franklin with sketches provided by George Back and Robert Hood, also a junior officer. The watercolour sketches were made both during and after the expedition and are from Back's notebooks and the engravings are by Finden. The choice of illustrations made by Back were not governed apparently by Franklin so that, when Franklin specifically and passionately comments on, 'the resplendent beauty of the moon which appears in all its lovely grandeur and frequently, at this time, passes round in full brilliancy, scarcely disappearing from the view during the twenty four hours,' Back decides not to show such an effect on the landscape wanting,

apparently, his own subject material with no other influence or direction. His relationship with Franklin was at most times distant. Back's role as second in command gave to him responsibility for detailed mapping and sketching places of importance on the way to the Arctic coast. Their orders, still those of the naval tradition, were for records in an orthodox style and to consist of that amount of detail comparable with a coastal profile. Chart making precision summed up by Admiral Beaufort in the words, 'plain distinct.'¹⁰⁰

The overland Arctic Canadian explorations resulted in pictures that fed into travel compilations of the many different discoveries of the early nineteenth century which Stafford argues, 'led the traveller into a habit of constructing a never ending series of hypotheses concerning physical reality on the basis of constant exposure to, and scrutiny of, its mutable data.'¹⁰¹

Dr. John Richardson F.R.S. 1787 - 1865, a naturalist and scientist, was sent to produce drawings of indigenous flora and fauna and these are ingeniously interwoven to vary and enliven the selection of illustrations depicting important places on maps. With these and other overland travel accounts Philip Edwards proposes, 'we are the audience in a kind of theatre. We are watching events being written about; written for an audience. The Lords of the Admiralty

perhaps.^{'102}

There are sixteen engravings in the account showing landmarks, wildlife, and a few of native Yellowknife Indians and local Eskimaux needed as guides. The Indians are mostly represented favourably but the French Canadian porters and the Eskimaux whom Franklin particularly feared and despised, are clearly mistrusted by all.¹⁰³

For the watercolour drawing *A View from the Portage La Loche*.(**Fig 1.47)** See **Fig 1.46 Red Dot 1**. Back again states his feelings of 'admirable astonishment' at this place after the miles of thick foliage of pine and Cypress. Suddenly he was 'now standing on the summit of a vast precipice like one bewildered in some vast labyrinth, knows not how or where to fix his eye.'¹⁰⁴ He admits that, 'I do not pretend to describe the beauties of this view the pencil being a more powerful vehicle than the pen for that purpose, for the whole is apt to vanish before the minute parts can be described.' The position for this picture was the western edge of the Clearwater River and the highest part of the *portage* between the Great Fish and the Coppermine Rivers.⁺

Franklin made few comments in his narrative on the wild scenery they pass through, but states at this point that this was 'the most picturesque scene in the northern parts of America.'¹⁰⁵

⁺ This refers to the carrying of boats or canoes round rapids or obstacles. Like higher ground separating two river systems one flowing North West and the other North East..

Back's stage by stage record of this journey is complete except for the last hundred and fifty miles during their return, when they nearly starved. In *Setting out on Point Lat- June 25th 1821*, (**Fig 1.48**) barren cliffs overshadow several canoe and sledge teams with their Indian guides and French Canadian porters, crossing the frozen lake. In the direction of their travel the horizon is faintly illuminated indicating that this route was navigable and endurable at a certain time between freezing winter and warmer summer temperatures.¹⁰⁶ By comparison *Expedition Landing in a Storm, 23rd August. 1821*, (**Fig 1.49**) has heavy black clouds on the horizon which threaten quickly increasing winds and waves that could drown the figures in the foreground.¹⁰⁷

The engraving expresses the daily threat of total disaster and a relief at the crews safe arrival ashore just in time. The escape is described in the narrative prosaically although the engraving contributes much more for the armchair traveller especially, of 'this delight I call the sublime. The passions belonging to self preservation are the strongest of all passions'¹⁰⁸

Their arrival at the mouth of the Coppermine River, (**See Fig 1.46 Red Dot 3**) is an opportunity with *View of the Arctic Sea from the Mouth of the Coppermine River Midnight, 29th July. 1821*. (**Fig 1. 50**) for Back to celebrate the discovery of an open Arctic sea. Light coloured

patches of pale sunlight in a blue sky, the pellucid quality of the calm sea with little ice close inshore, are all encouragements for success in the next stage of their journey Cape Krusenstern, named by an earlier Russian expedition by sea, and the distant offshore icepack were of special importance for the Admiralty. This coastal area was now a possession of the British Crown and, as Back's picture suggests, was a discovery and an accomplishment of true significance, accounting for the inclusion of the two Union flags. They had completed one important piece of coastal geography between the Atlantic and Pacific Oceans.¹⁰⁹

Four hundred miles of this coastline east from the Coppermine River to Point Turnagain was then explored in their small boats. The picture *Expedition doubling Cape Barrow. July 1822.* (**Fig 1.51**). See **Fig.**

1.46 Red Dot 2. This was through the open Arctic sea in summer proving that a route along the top of northern Canada would be possible even for larger ships.¹¹⁰ The position reached by the Franklin expedition before turning back was 250 miles from land reached by John Ross only seven years later, John Barrow was evidently encouraged by the potential commercial and strategic advantages in these regions and ordered that a book be produced to prove that the expedition had found the open Arctic sea which he consistently

claimed did exist. From the publication engravings he particularly asked that 'superlatively beautiful' etchings of Finden to be 'taken off so that a set could be provided to Batty and one for myself.'¹¹¹

The second Franklin land Expedition, 1825 - 1827, was expected to complete the map of the central and western Arctic coastline of Canada by exploring westwards intending eventually to meet another Admiralty expedition sent through the Bering Strait travelling eastwards. The two expeditions were only one hundred and sixty miles apart at one time but never made contact. A map shows the extent and direction of the route taken. *Franklin's second overland expedition 1825 – 1827.* (**Fig. 1.52**).

Dr. John Richardson F.R.S accompanied the expedition because of the standard of his earlier reports and broad scientific expertise. He took fewer instruments than previously because of the plan to travel a greater distance and to save space for food and other essentials.

George Back and Edward Kendall R.N were joint artists. The expedition mapped 610 ten miles of the coastline out of a total distance covered of 2048 miles. Backs' chief responsibility was to complete a 'daily delineation of the coast in his field book.'¹¹²

The twenty nine engravings in the expedition account are described by Franklin as;

‘views that were chosen from a large collection of drawings made by Captain Back and Lieutenant Kendall. The interesting nature of the scenes will be for the reader to best judge, but for their fidelity I pledge myself in the most unreserved manner.’¹¹³

Franklin wanted *Winter View of Fort Franklin 1828*. (**Fig 1.53**) See **Fig 1.52. Lake of the Woods area.** as the frontispiece to his narrative since it was the base from which the expedition set out and returned to late that same year. The fort was built by expedition members and shows the small observatory to the right of the main building with the Union flag. From this observatory daily sightings and recordings of the *aurora borealis* were taken with many descriptions of solar radiation and strength. The increases in levels of radiation reaching earth were now correctly attributed to the clearness in the atmosphere in springtime and less cold temperatures, but no pictures resulted. ‘The greater transparency of the air in the spring before the snow disappears.’¹¹⁴

George Back when once more in Fort Franklin finished a few watercolour sketches from those drawings made *en route*. These mostly comply with the usual instructions from the Admiralty to record truthfully points of interest and significant places marked on the expedition maps. There was increasingly a desire on the part of the

artist travelers Stafford believes, which included a more practiced artist such as George Back, to reproduce beyond the factually accurate account work that could also be appreciated by an audience as ‘truthful’ to the moment, and to the subject.¹¹⁵

Those truthful points of interest from this journey include some sketches that are unusual. For *Winter Houses of the Esquimaux, July 26th 1826. (Fig1.54)*. Franklin records dispassionately that, ‘the annexed engraving from Lieutenant Back’s sketch renders further description unnecessary.’ The shape and construction of the unusual wooden cabins are from well preserved tree trunks. Driftwood moved by ocean currents some with crucifix like shapes. Each house was large enough Franklin comments, for between one to three apartments. When covered with snow and with lamps or a fire burning within, these habitations, he assumes, ‘must be extremely warm.’¹¹⁶ He too makes clear from this description that these houses, much like the *Iglu* showed skills present in the native Eskimaux, that led to buildings more weather proof and sophisticated than he and others had previously considered.

Their travel was very hazardous as the sea ice on this section of the coast was very unpredictable in summer. *Iceberg adhering to an icy reef. View to seaward. August 2nd 1826. (Fig 1.55) See Fig 1.52 Red*

Dot 1 , and *Boats in a swell amongst Ice. August 24th 1826.* (**Fig 1.56**)

See Fig 1.52 Red Dot 2. Both engravings include a series of jagged and weathered ice floes large and small, amongst areas of broken pack ice near to the shore. The boats were surrounded by ‘masses of ice which were tossing with the swell and from which large pieces frequently fall.’¹¹⁷ The contorted shapes appear like enormous mouths and seem eager to consume them as they row against a powerful swell. The shapes, movements and conditions are again reminders of the ‘strange loomings’ remarked upon by George Forster in Antarctica which he, at that time, believed were the result of ‘ a blunted light.’¹¹⁸ These contorted shapes were in fact remains of floe ice shaped by the seasonal melting and refreezing cycles, and wind with high moisture content. This number of bergs and the danger they frequently provided delayed the expedition in the fragile portable boats. Constant fog made star observation for chart making difficult and very few coastal profiles were made during this period of the expedition.

‘Hardly a day passed after our departure from the Mackenzie (River) and our return, that the atmosphere was not at some time so foggy as to hide every object more distant than four or five miles.’

Their daily log shows that of the 39 days spent on their journey 27 were foggy whilst the narrative explains that ‘there is a constant

exhalation of moisture from the ice and swamps west of the Mackenzie during the summer months, which is perhaps prevented from being carried off by the Rocky Mountains and becomes condensed into a fog, but the coast to the east of the Coppermine River is high and dry and far less encumbered with ice.’¹¹⁹ Franklin’s first expedition established in principle that an ice free route could exist along most of the north Canadian Arctic coast, but the evidence and experience gained during the second journey conflicted with the first by showing that the route was in shallow water and subject to bad ice even in summertime.

Section 3.2 *Captain George Back. Expeditions to the Coast of the Arctic Sea. 1833 - 1834 and in H.M.S. Terror in 1836 -1837.*

George Back's two final expeditions consisted of one overland and another by sea to find the missing sections of the most northern and north eastern coasts of Canada. The first expedition was given a small grant by the Government and was supported by the Geographical Society in London.¹²⁰ The route travelled lay across northern Canada and down the Great Fish River on the same route that he had explored with Franklin in 1819. His instructions originally were to look for John Ross missing for four years.¹²¹ Scientific work included more observations of the *aurora borealis*, temperature recording, the description of rock formations and collection of unusual rock specimens.¹²² Dr. John Richardson F.R.S and Dr. Richard King from the Hudson's Bay Company, undertook the rock gathering and geological recording, and all temperature measurements.

The sketches of the Canadian landscape made by Back and the engravings by Edward Finden and Louis Haghe were personal choices as on this occasion although still a serving naval officer he was not under the same orders from the Admiralty for an account of their route and work as previously. This was primarily seen as a searching expedition even though landmarks he does sketch now show some

signs of understanding, empathy mixed admiration for the landscapes.

He acknowledges to ‘admitting the feeling that there is something appalling in the vastness of solitude like this.’¹²³ As the expedition travelled into the north they crossed the large area of Lake Aylmer full of ice crevices which, especially during summer months was treacherous and dangerous. *Crossing Lake Aylmer. 25th June 3 am.*

1834. (**Fig 1.57**) is sketched with the artist watching the main group spread out across the lake with sledges and dogs moving quickly before the ice of the lake melts. The spikes of semi thawed and refrozen ice which could pierce leather boots, are included on the right. A sign of summer warmth in distant parts of the sky at 3 O’clock at night does not reduce the evil harshness of this landscape with the deep and wide crevices causing physical as well as mental strain in their crossing.

The expedition reached Point Barrow but were prevented from exploring further west in the direction of the Coppermine River by ice inshore and bad fog conditions on the coast. *Western View from near Mount Barrow. August 1834* (**Fig 1.58**). supports the narrative which states that the wet fog was ‘dark and indefinable,’ whilst the ‘soil in which we stepped made us sink half a leg deep,’ The watercolour sketch and engraving *View to Seaward from Montreal Island. 1st*

August 1834. (**Fig 1.59**) shows another view over the Arctic ocean showing how, even in mid summer, the ice was remained thick over the sea beyond the group of sailors and the artist carrying his easle.

The watercolour *Thunderstorm near Point Ogle. 8th August 1834.* (**Fig 1.60**) defines again the confusion created by atmospheric conditions and an unidentified island in the sea in the middle ground. The channel for navigation, the Chantrey Inlet, is shown on the left beside the camp which Back oddly notes caused him to observe, ‘one fancied oneself in one of the parched plains of the East rather than the shores of the Arctic Sea,’¹²⁴ The bareness of the brown earth and the *mirage* of a distant island which did not exist, perhaps inspiring strange comparative ideas.

The maps, sketches, and many specimens of rocks which Back and his associates Richardson and King obtained satisfied the scientific sponsors and the newly recognised Royal Geographical Society of London. At this point the involvement of the R.G.S. steadily replaced the Royal Society in financial and practical support for expeditions overland. The *Athenaeum* described this journey for this reason as ‘more than usual a national enterprise’.¹²⁵ To find and map the last areas of this Arctic coastline George Back was given command of another expedition sent to Hudson’s Bay by ship and then ordered to

land and to cross the Melville Peninsula hauling small boats west to the Great Fish River. This route, it was believed, would finally prove that open water existed along the length of the north Canadian coastline during all three summer months.¹²⁶ The Royal Geographical Society contributed financial support and the expedition received a considerable Government grant. New instruments were again taken for evaluation including a special 'night telescope' for astronomy and for completing the instructions that officers were to 'note down on each day the state of the sea with regard to ice, it being of *great* importance to ascertain whether the Arctic Sea to the northward of the north coast of America be from appearance navigable by ships of considerable burthen.'¹²⁷

The artist selected for this voyage was Lieutenant William Smyth R.N. 1800 - 1877, who like George Back, had artistic abilities beyond those provided by his naval training. His experience as an artist included an illustrated atlas of Sicily, and coastal profiles and landscape sketches in different places around the Mediterranean. Back, as overall commander, expressed confidence that Smyth would record all relevant events objectively. The lithographer, Louis Haghe whose business Day and Haghe were the Royal lithographers, were commissioned to produce the plates for the voyage account.

Only seven lithographs were eventually chosen for the published account and these were entirely concerned with events on H.M.S. *Terror* which was trapped by ice floes, and carried along the northern coast of Southampton Island unable to break free. See **Chart of the North Coast of Southampton Island showing track of HMS Terror. (Fig 1.61).**

George Back did not supply watercolour paintings or sketches for the expedition narrative even though at the beginning of this voyage he made the sketch *Ship by an Iceberg, near the Hudson's Strait.* (**Fig. 1.62**) for a watercolour drawing *Iceberg.*(**Fig 1.63**). These both show a cathedral shaped iceberg many times bigger than H.M.S. *Terror*. Back writes that the sight was of startling beauty and that, 'nothing could exceed the interest of the scene. An enormous berg with a perpendicular face of 300 feet surrounded by smaller bergs.'¹²⁸ The warm light from the sun setting on the western horizon to the right of the ice berg contrasts with its deep blue hues in recesses and caves. Chauncey C. Loomis in *The Arctic Sublime* analyses Arctic light in several similar pictures suggesting that it somehow contributed to the 'eerie silence which was a part of a schema in the general depiction of icebergs along with their magnificent natural and architectural shapes.'¹²⁹ This deep silence is implicit in the immobility of the

iceberg with *Terror* lying becalmed alongside. There is a slight mist on the horizon and the sea is smooth and seemingly transparent. It is a subject which Stafford would argue had a congruent reference to ‘original creation as unseen and unspoiled.’ and with the immobility and presence described by George Forster, the naturalist, as ‘a silence terrifying and horrible in all its consequences.’¹³⁰ The *Terrors*’ small cutter and the crew are collecting ice for drinking water in the identical way Cook described and Hodges had previously sketched in Antarctica.

The second mate on the *Terror*, Robert McClure R.N. writing in his private journal says, ‘about six in the afternoon the fog cleared and what a sublime view broke upon the sight. The subject was an object of curiosity to those who, like myself, had never seen icebergs before. All ideas must fall short of far short of reality. Nine immense floes varying in size from half to three miles in circumference and from seventy to two hundred and fifty feet in height presenting each with an appearance of an island with Hill and Dale and fanciful formations of fields.’¹³¹ McClure also carefully records that the air temperature fell by F -7 Degrees as they approached the largest iceberg.

The medium of watercolour conveys not only the simplicity and delicacy of the tints but also the transparency described in a

Blackwood's Edinburgh Magazine article about the Arctic regions as, 'having no colouring of their own but the crystalline surface of the snow and the translucency of the bergs and the ice particles suspended in the air.' This article went on to explain that, 'the angle at which the incident light shines on them - through them - determines the wavelength of the light that travels as from them to an observing eye; blue becomes green, yellow becomes red, ultramarine shaded over into the profoundest colour of the sky in a dazzling *melange* of wavelengths because of the angles of light being changed over and over again by the same forces that moved the summer ice.' ¹³²

The dating of both Back's picture and his original sketch are unknown. Back probably completed the watercolour drawing sometime after the voyage account was published which meant it was not selected for that reason. The work was not publicly exhibited or sold and is difficult to date precisely. The colours used are important to authenticity in the subject and Back may have felt that no lithographer would do justice to the quality of the material. He may also have considered that this iceberg was not important enough to justify a place in a publication that should be objective above all else. The large and beautiful icebergs which impressed Back and other

members of his crew were soon replaced by ice in quantities and proportions which became a deadly adversary. Lithographs by L. Haghe for the published account have an apocalyptic and awful quality.

The frontispiece engraving *Crew of H.M.S. Terror completing Snow Walls during a heavy Gale*, shows a heavy gale blowing, (**Fig 1.64**).

See Fig 1.62. Red Dot 1. The conditions were extreme and their log records a daily struggle to protect the ship through the frequent gales and heavy pack ice. The lithograph illustrations all show the ship besieged by ice and the stages and trials they underwent trapped within one large ice floe for 8 months.

H.M.S. Terror thrown up by the Ice in the Frozen Strait. (**Fig 1.65**) shows the crew fighting to clear a route through the pack ice with spades. The task was impossible so that Back eventually writes ‘we drifted with it.’ The hopelessness of this situation and the real prospect of sinking and being left stranded in the ice is emphasized by entries from Back that only ‘divine intervention’ could assist them,

At one time with the *Terror* buried under a snowdrift and the sun visible briefly one morning, the crew are able to walk to the edge of floe in which they are trapped. There they can ‘witness the work of destruction, for it was a spectacle indeed not less sublime than

appalling - filling the mind with awe and at the same time inspiring it with devotional gratitude to that Being whose Providence watched over us and preserved us in the middle of such fearful perils.’¹³³

Their helplessness and dependency on God is repeated by Back including his awareness that their appalling situation proved the ‘might of Nature, the feebleness of Man, the triumph of spirit over matter and of Man trusting in the protection of Omnipotent Providence.’ He adds in this same tone ‘It was a desolate solitude, which, from the absence of tracks, seemed to be equally abandoned by man and animals. The masts of the ship were in sight above the peaked hummocks, imploring the protection of Heaven.’¹³⁴

The climax of the voyage is explained with *The Crew of H.M.S. Terror saving the boats and provisions on the night of the 16th March 1837*. (**Fig 1.66**). See **Fig 1.63. Red Dot 2**. Sailors are hastily removing stores and small boats ready to save themselves if the ship is crushed by the ‘wave of towering ice.’ The extreme danger of their position is clear from Back’s words, ‘it was an awful crisis rendered more awful by the mistiness of the night and dimness of the moon.’

The lithograph records moonlight in the way Back describes. It casts a pale light over the struggling crew on the ice set amongst menacing shadows and the piles of unforgiving ice surrounding the ship. The

pressure in which they are caught is shown by deep *crevasses* in the foreground ice and by the ship masts and spars at very odd positions suggestive of a shipwreck.

The oil painting by Smyth, *Perilous position of H.M.S. Terror, Captain Back, in the Arctic Regions in the Summer of 1837* (**Fig 1.67**) was made seven years after the voyage ended. The artist puts the view in a different position from the engraving for the lithograph. The sailors on the ice are further away and appear smaller so that their efforts seem even more hopeless. Emphasis is placed more on a moon in the threatening stormy sky whilst the positions and angles made by the ships rigging are slightly more upright placed to suggest a memorable silhouette for the probable place of a crucifixion. The piece and its apocalyptic quality may refer to the work by Francis Danby, 1793 – 1861, *The Deluge* (**Fig 1.68**). This oil painting shows a few humans trapped on crag of rock surrounded by turbulent and heaving flood waters. The survivors in the water clinging to wreckage see an angel rescuing just one of them whilst others are being carried below to an underworld. A light from high above the dark clouds illuminates the awful scene. A red disk of the sun, which resembles an eye, offers one small indication of hope. God's presence and help for the human race will continue.

Smyth's ice painting has such contrasts of light and darkness and he uses one small light in the stern cabin as a signal that the ship is not yet abandoned and destruction may be avoided. It is a scene of destruction with a suggestion that the end of the world might arrive in the form of ice not by the usual fire or earthquake in the Bible. The picture was not apparently exhibited at any major exhibition, or reviewed by art critics of the time.

The escape of the ship and crew from the crushing ice is explained in the engraving, *Situation of HM.S. Terror on the 14th July 1837*. (**Fig 1.69**) See **Fig 1.62 Red Dot 3**. The crew are sawing into the ice around the hull of their ship which is listing moments before they finally break free. Back describes the joy of this escape, 'many cheers commemorated the occasion' and ponders 'what manifold mercies had shielded us when all seemed desperate, and now we were free,'¹³⁵ The beams of a strengthening sun enhance the mood in the lithograph of a heaven sent salvation.

Newspaper reports of this expedition all refer to the extraordinary return of the badly damaged ship and its entire crew in contrasting ways. The *Athenaeum* reviewing the narrative stated that it was, 'the final pages of the strange eventful chapter of Arctic Discovery, so creditable to British enterprise and endurance' and that, 'the gigantic

might of Frost and Ocean, the powerlessness of man to cope withal and the protecting hand of Providence were revealed to all.' The *London Examiner* on the same date stated, 'we could not conclude without a mention of the very striking sketches of the various positions of the ship in the ice with which the volume is enriched.'¹³⁶

The *Journal of Belles Lettres. Arts and Sciences etc*, reviewing the written and the visual narrative observed that, 'the effect on our minds has been something like that of Coleridge's *Ancient Mariner*.'¹³⁷ The earlier proposal by Sir John Barrow that a well provisioned ship could stay safely in ice for long periods and 'drift' through the North West passage, was now convincingly disproved.

Throughout the narrative the state of helplessness felt by the officers and crew is explained. They became part of an iceberg within a mass of southwards drifting pack ice without control over their speed or direction and always at the mercy of tide and wind. The 'miracle' of their endurance and heroism under the terrible conditions was exactly recounted by Back's narrative and the sequence of illustrations, The lithographs are very explicit as to the mood and steady determination of the men despite the remote chance that the ice would allow them means of escape..¹³⁸

George Back extraordinarily believed that, 'despite the various

ineffectual attempts to fill up the blank on the northern charts, with a tolerably open season the whole affair is within the accomplishment of six months.’¹³⁹ His view despite the recent experience on *Terror* which proved that a ‘tolerably open season’ was unpredictable and lasted a short time is a part of Back’s and Parry’s naval self discipline and self confidence even though both knew that changeable ice conditions would never guarantee the completion of the passage.

Section 4. Captain *James Clark Ross. Expedition to the Antarctic.*
1839 - 1843.

The British Admiralty had decided against serious exploration of Antarctica since the return of James Cook's voyage in 1775. Their interest was quickly revived by news of a French expedition led by Commandant Dumont d'Urville sent in 1837 to look for the Southern Continent. Even though Barrow's autobiography states that British objectives in the Southern Ocean were strictly scientific and not to secure British territorial possession this is by no means certain.¹⁴⁰

Scientific research was required 'for the purpose of making magnetic observations in the South Polar Regions and establishing magnetic stations at St Helena, the Cape of Good Hope, and Van Diemen's Land on the outward passage.'¹⁴¹ There were no instructions for any detailed study of ice conditions except to watch out for and establish reasons for the numbers of large icebergs. Cook's narrative and his descriptions of the tabular bergs are used by Ross in the same context. The expedition sent by the Admiralty in 1839 comprised two ships. H.M.S. *Erebus* and H.M.S. *Terror*. It was commanded by James Clark Ross, nephew of Sir John Ross and included Joseph Dalton Hooker a botanist, David Lyall his assistant, Sir James Herschel an astronomer with special interest in measuring light intensity, and John. E. Davis

1815 - 1877, hydrographer and voyage artist. The chart of the Antarctic part of this voyage is **Fig 1.70. J.E Davis. Victoria's Land discovered in HMS Erebus and Terror under command of Captain J.C. Ross. 1841.**

The watercolour sketches made during the voyage have a similarity to the work of F.W. Beechey on his Spitzbergen voyage in 1818. They show a conformity to the simplicity and objectivity and use of colour for the ice, clouds and the sea in the manner of the establishment profile painter. The Victoria Ice Barrier, later re named the Ross Ice Shelf, was estimated to be between six hundred to eight hundred and fifty miles in length which Davis paints using delicate blue and grey tones. To show the length of this extensive ice barrier and its proportions the ships are placed in the foreground, given in the log of H.M.S. *Erebus* as being one mile and a half from its edge, *Part of the South Polar Barrier. (Fig 1.71)* Despite the implicit danger from the jumbled floe ice and many small icebergs the sea is calm and unthreatening.

As well the discovery of this ice barrier or shelf, two volcanoes were seen which, 'surpassed the terrors of the Northern Sea in that these volcanic Alps vomited fire in the midst of the snows and darkness.' These unusual features were all important scientific and geographic

discoveries and were of real potential interest for the public.¹⁴² James Clark Ross, in a letter sent to H.R.H Prince Albert, was struck by this combination of fire and snow in the Southern hemisphere. ‘The perennial snow which clothes the whole of this land extended to the verge of the craters, so that the flames and smoke appeared to issue from a monstrous iceberg.’¹⁴³ Ross also comments upon the significance of the two volcanoes.

‘Their discovery in so high in a Southern Latitude cannot but be esteemed a circumstance of high geological importance and interest and contribute to throw some further light on the physical construction of our Globe.’¹⁴⁴

The *Illustrated London News* in a front page report using reports from Hooker, gave an abbreviated account of the voyage narrative along with an engraving by S. Sly *Victoria Land in the South Polar Regions Discovered by Capt. Sir J.C. Ross.* (**Fig 1.72**) **See Fig 1.70 Red Dot 1.**

This includes the volcanoes named Mount Erebus and Mount Terror, with the ships sailing through pieces of drifting pack ice.¹⁴⁵ Hooker described this scene as ‘a perilous situation at the time of the discovery. The icy barrier swaying to the vast undulation of the ocean which is shown in the cut in a very striking manner.’ The description ‘vast undulation’ is shown by the engraver with a tunnel in the

composition through which the ships are moving towards the volcanoes smoking on the horizon. Their height is suggested by the peaks emerging from clouds.

In Davis' original the volcanoes are barely visible in the centre of his coastal profile *Victoria Land. Discovered by Capt Sir JC Ross*. (**Fig 1.73**). The shape of the Antarctic coastline and Mac Murdo Bay on which they appear is more apparent.

These volcanoes were a distinctive new element in the visual account of ice or any geography presented in the Arctic accounts but appear less newsworthy or interesting journalistically than the reproduction of Davis' *New Years Day on the Ice. 1842* (**Fig 1.74**). The crew and officers are celebrating as if they are at home in Britain, except that they are in fact, floating on an iceberg. The icebergs which Cook used as a source of good drinking water, and Parry as a harbour in certain emergencies, represent the apparently secure, even if temporary location for their festivities. This bucolic scene made to prove that the officers and men had control over the situation and expanded upon the novelty of familiar enjoyments re created on the ice. It has news value of the kind beneficial to the public perception of the determination, resourcefulness and daring of the Royal Navy.

Two scenes by Davis chosen for the voyage account were taken as

the basis for the oil paintings by Richard Brydges Beechey R.N.¹⁴⁶ A serving naval officer, he produced many marine paintings shown at the Royal Academy and the British Institution. The paintings from Davis' original sketches are Antarctic sea conditions at their most extreme. A vision of the underworld, such as Dante's ninth circle of Hell.¹⁴⁷ From those few Antarctic paintings existing they leave little doubt as to the catatonic nature of its ice.¹⁴⁸ The audience are physically threatened by the steep waves and hurled into the faces of the tabular icebergs, *Erebus passing through the Chain of Bergs* (**Fig 1.75**). See **Fig 1.70 Red Dot 3** and the lithograph from the voyage account, *The Collision to Windward of the Chain of Bergs, 13th March 1842* (**Fig 1.76**) show the collision between the ships moments before *Erebus*, in the foreground, manages to avoid the closing icebergs shown in Beechey's painting. Both studies give a realistic version of the size of the waves and ice floes. For *A Gale in the Pack* (**Fig 1.77**), the ships are surrounded by jagged, 'rolling fragments of ice, hard as floating granite which were dashed against them by the waves with so much violence that their masts quivered as if they would fall out at every successive blow.'¹⁴⁹ James Clark Ross reported to the Admiralty that the 'situation of the heavy sea in the pack rendered the position of our ships of one of more than ordinary peril and difficulty.' Heavy masses

of ice repeatedly charged them but they incurred no serious damage. Ross also reported that, 'having penetrated four hundred and fifty miles into the pack ice in a direct line we had, to our rather equivocal satisfaction, found themselves to the Southward of our own great navigator, and the intrepid Russian Bellinghausen.'¹⁵⁰

These works by Beechey may have been inspired by the publication of an anonymous diary of this voyage printed by the *Illustrated London News* in December 1859. The introduction explained that it was kept by 'one of the hardy and enthusiastic adventurers' who had 'fearlessly gazed upon the ice palaces of the Polar Demons.'¹⁵¹ The references to the 'hand of God and of intervention of Divine Providence' and to the 'exceeding darkness' as with the 'ebbing sea' are very close to the descriptions for sea conditions related at the time of Davis' *Collision to Windward of the Chain of Bergs*. Generally apart from the *ILN*, the newspaper coverage and thus public interest was limited and no shows or panoramas were based on their discoveries. James Clark Ross was awarded a knighthood but those scientific and geographic discoveries including the location of the southern magnetic Pole, did not have seem to appeal to the British public as much as the well established imagery for the Arctic and the North West passage. Barrow too was preoccupied with the

continuation and completion of the search.

John Wilson Carmichael (1799 – 1868), also professional marine artist, produced a painting of the *Erebus* and *Terror* in Antarctica based on Davis's work and reports of that voyage. In *H.M.S. Terror and H.M.S. Erebus in the Antarctic 1847*, (**Fig 1.78**) the vessels are in front of large mountain peaks bathed in light from a setting or rising sun.¹⁵² Carmichael uses the Arcadian classical landscape style in his view of the Antarctic Continent which is inaccurate topographically and has been positively identified as Cape Byam Martin in Melville Sound, part of the North West passage.¹⁵³ **See Fig 1.22 Red Dot 4.** It has been suggested that Carmichael needed to use a romantically charged landscape to create a more saleable picture and to glorify the courage of John Franklin for whom he had great admiration. These factors outweighing other suggestions that the picture intended to re-establish the fabled lost Southern Continent dismissed by Cook. Completed approximately two years after that Franklin's expedition departed and before concern arose over his whereabouts, the picture was exhibited on several occasions in London.

The Franklin expedition was sent to find the remaining unexplored section of the North West passage and was considered certain to succeed because of the experience of its crews and officers, the types

of equipment, including railway steam engines fitted into *Terror* and *Erebus*, and navigational reports and data from the previous voyage accounts. Remarkably though Franklin was still very dependent on whaling seamen, ‘ice masters’ to guide him as all previous expeditions had over the previous 30 years. The understanding of ice had not appreciably improved in the Royal Navy despite the observation, frequent recording and detailed description of thickness and position over those years. The searches to account for his disappearance took place both by sea and over land and lasted for ten years before finally yielding one solution for the route of a North West passage and, eventually, the last position of Franklin and his lost ships.

.

-
- ¹ Philip Edwards. *The Story of the Voyage*. Cambridge University Press. Cambridge. 1994. Intro p8.
- ² John Barrow. *A Chronological History of Voyages into the Arctic Regions*. John Murray London. 1818.
- ³ Barbara Maria Stafford. *Voyage into Substance. Art, Nature and the Illustrated Travel Account. 1760 - 1840*. MIT Press. Cambridge. MA. 1984. p17
- ⁴ Louis - Anthoine de Bourgainville F.R..S.. *Essai Historique sur les navigations anciennes et modernes dans les hautes latitudes septentrionales*. 1801. pp54- 55. Quoted by A. Savours. *A very interesting point of Geography*. Arctic. Vol. 37 4th December 1984. pp54- 55
- ⁵ John Barrow. *Voyages into the Arctic Regions*. John Murray. London. 1818. p 13 – 14.
- ⁶ Samuel Engel. *Memoires et Observations geographiques et critiques sur le situation des pays septentrionaux d'Asie et d'Ameriqued apres les relations les plus recentes*. Lausanne. 1765.
- ⁷ Anne Savours. *A very interesting point in Geography. The 1773 Phipps Expedition towards the North Pole*. Arctic. Vol. 37. No 4. December 1984. p 402 - 426.
- ⁸ William Scoresby the Younger. *An Account of the Arctic Regions with a History and Description of the Northern Whale-Fishery*. 2 Vols. Archibald Constable and Co. Edinburgh. 1820.
- ⁹ William Scoresby the Younger. *The Arctic Whaling Journals of William Scoresby the Younger. Volume III. The Voyages of 1817, 1818, and 1820*. Ashgate for the Hakluyt Society. 3rd Series No. 21. London. 2009. p 109. 'They have their name from the Dutch, 'isberg', signifying ice mountain'.
- ¹⁰ Bernard O'Reilly. *Greenland and the Adjacent Seas and North West Passage to the Pacific Ocean illustrated in a Voyage to Davis Strait during the summer of 1817*. Baldwin, Craddock and Joy. London 1818.
- ¹¹ William Scoresby Junior. M.W.S. *On the Greenland or Polar Ice*. Paper published in memoirs of the Wernerian Society. 1815. Vol.2. pp270 -271.
- ¹² William Scoresby Junior. M.W.S. *Voyage to Greenland*. p26.
- ¹³ Thomas & Cordelia Stamp. *William Scoresby. Arctic Scientist*. Caedmon of Whitby Press. Whitby 2002. p18. Scoresby was the pupil of Dr James Hutton and John Playfair, Professor of Natural Philosophy both closely associated with new theories concerning the evolution of the earth.

¹⁴ Alexander Von Humboldt. *Aspects of Nature in Different Lands and Different Climates. With Scientific Elucidations*. 3rd Edition. Vol. 2 Longman, Brown, Green and Longmans. London 1850. p256.

¹⁵ Letter of Sir Joseph Banks to William Scoresby Junior. September 22nd 1817. Whitby Museum. Whitby. Scoresby Archive. ‘ The decrease in Polar Ice In my judgement (is) of greater importance to the prosperity of this country if, as I conceive to be the case the frosty springs and chilly summers we have been subject to for many years past.’ By reply Scoresby sent Banks a copy of his *Treatise on Northern Ice* and a letter suggesting that now was the time to search again for the North West passage.

¹⁶ Tom & Cordelia. Stamp. *William Scoresby. Arctic Scientist*. Caedmon of Whitby Press. Whitby. 1975. p79.

¹⁷ Bernard O'Reilly. *Greenland and the adjacent seas and North West passage to the Pacific Ocean. Illustrated in a Voyage to Davis' Strait during the summer of 1817*. Baldwin, Cradock and Joy. London. 1818. Intro.pii.

¹⁸ Bernard O'Reilly. *Greenland and the adjacent seas and the North West Passage to the Pacific Ocean. Illustrated in a Voyage to Davis's Strait in the summer of 1817*. Baldwin, Cradock and Joy. London.1818. p. 245.

¹⁹ Bernard O'Reilly. *Greenland and the adjacent seas and the North West Passage to the Pacific Ocean. Illustrated in a voyage to Davis' Strait in the summer of 1817*. Baldwin, Cradock and Joy. London 1818. p 196.

²⁰ Bernard O'Reilly. *Greenland and the adjacent seas and the North West Passage to the Pacific Ocean. Illustrated in a Voyage to Davis' Strait in the summer of 1817*. Baldwin, Cradock and Joy. London.1818. p.188 and pp194 -196.

²¹ Bernard O'Reilly. *Greenland and the adjacent seas and the North West Passage to the Pacific Ocean. Illustrated in a Voyage to Davis' Strait in the summer of 1817*. Baldwin, Cradock and Joy. London.1818. pp.199 - 200

²² Bernard O'Reilly. *Greenland and the adjacent seas and the North West Passage to the Pacific Ocean. Illustrated in a Voyage to Davis' Strait in the summer of 1817*. Baldwin, Cradock and Joy. London. 1818. p. 92.

²³ J. Lindsay Stainton. *British Landscape Watercolours. 1600 - 1860*. British Museum Publications Ltd. London 1985.p9. This interest could be traced to the Royal Academy Exhibition of 1771 which included seven watercolour drawings of Swiss views by William Pars. This was the start of an association between English landscape artists and the Alps which was to be of some importance in the development of Romantic painting.

²⁴ Anthony, Earl of Shaftesbury, "The Moralists", in *Characteristics of Men, Manners, Opinions, Times*. (Ed. John M. Robertson). New York. 1964. p 119.

²⁵ Barbara Maria Stafford. *Voyage into Substance. Art, Science, Nature and the Illustrated Travel Account. 1760 - 1840*. M.I.T. Cambridge. MA 1984. p437

²⁶ Barbara Maria Stafford. *Voyage into Substance. Art , Science, Nature and the Illustrated Travel Account. 1760 - 1840*. M.I.T. Cambridge. MA. 1984. p17.

²⁷ Robert G. David. *The Arctic in the British Imagination. 1818 - 1914*. Manchester University press. Manchester. 2000. p 29.

²⁸ Commander Fitzroy. R.N. *View Directions Extracts, 1831 - 1837*. Hydrographic Office. London. 1831.

²⁹ John Franklin refers to this in a letter to his friend Cumby in December 1819 after his voyage to Spitzbergen. SPRI 023/4/2 (JF)

³⁰ Russell.A. Potter. *Arctic Spectacles; The Frozen North in Visual culture, 1815 - 1875*. University of Washington Press. Seattle. 2007.p55.

³¹ Barbara Maria Stafford. *Voyage into Substance. Art, Science, Nature and the Illustrated Travel Account.1760 - 1840*. M.I.T Cambridge. MA. 1984. p 356

³² Sir John Barrow Bart .F.R.S. *Voyages of Discovery and Research within the Arctic regions from the Year 1818 to the present time*. John Murray. London. 1846.

³³ Captain John Ross. K.S. *Voyage of Discovery in His Majesties Ships Isabella and Alexander for the purpose of exploring Baffin's Bay and inquiring into the probability of a North West Passage*. Longman , Hurst, Rees, Orme, and Browne. London. Vol 2. p65.

³⁴ Captain John Ross. K.S. *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffins Bay and inquiring into the probability of a North West Passage*. John Murray. London 1819. Official instructions. p11.

³⁵ Captain John Ross. K.S. *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffins Bay and inquiring into the probability of a North West Passage*. John Murray. London. 1819. Vol.2 p74.

³⁶ Captain John Ross. K.S. *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffins Bay and inquiring into the probability of a North West Passage*. John Murray. London. 1819. Vol. 2.p 65

³⁷ William M. Ivens. *Prints and Visual Communication*. Routledge and Kegan Paul. London. 1953. p 99. Ivens also notes that as the 19th century progressed up to the introduction of photography the involvement of several specialist engravers made this problem worse with some engravers never having seen the original work they were engraving.

³⁸ Philip Edwards. *The Story of the Voyage*. Cambridge University Press. Cambridge.1994. p 32.

³⁹ Captain John Ross. K.S. *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffins Bay and inquiring into the probability of a North West Passage*. 45cm x 17.5cm. Drawing by Captain John .Ross. Coloured Engraving by Havell and Sons. John Murray. London. 1819.pp.138/139

⁴⁰ George Cruikshank. *Landing the Treasures, or Results of Polar expedition*. Coloured Drawing.S.P.R.I. Cambridge. ref. 59/3/12 .

⁴¹ Captain Frederick William Beechey. R.N. F.R.S. *A Voyage of Discovery towards the North pole performed in His Majesties Ships Dorothea and Trent under the command of Captain David Buchan R.N*. Richard Bentley. London. 1843. Figure 3. p68..

⁴² Captain John Ross.R.N. K.S. *Narrative of a second Voyage in search of a North West passage and of a Residence in the Arctic Regions. 1829,1830,1831,1832 and 1833* .A.W. Webster. London. 1835. p231.

⁴³ Captain John Ross.R.N. K.S. *A Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffins Bay and inquiring into the probability of a North West Passage*. John Muray. London. p 74.

⁴⁴ Sir John Barrow Bart. F.R.C.S. *Voyages of Discovery and Research within the Arctic Regions from the years 1818 to the present time*. John Murray. London. 1843. Stated as commentary of the voyage of William Edward Parry in 1819 - 1820 as compared to that of John Ross.p 22.

⁴⁵ Barbara Maria Stafford. *Voyage into Substance. Art, Science, Nature and the Illustrated Travel Account, 1760 - 1840*..MIT Press. Cambridge. M.A. 1984. She notes that Ross was a great classifier of phenomena and meticulously distinguished 'amongst a pleiad of specific characters possible to frozen matter; bergs, fields, patches, streams, loose ice, sailing ice, brash ice, cakes and hummocks'. p274.

⁴⁶ Captain John .Ross.R.N. K.S. *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffins Bay and inquiring into the probability of the North West passage*. 24cm x 13cm. Drawing by Captain John

Ross. B&W Engraving by Havell and Sons. P 183/184. John Murray. London. 1819.

⁴⁷ Captain John Ross R.N..K.S. *Croker's Mountain*. Reproduced in *The Polar Rosses*. Harper and Row. New York. 1973

⁴⁸ Captain John.Ross.R.N. K.S. *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffins Bay and enquiring into the probability of a North West Passage*. 21cm x 17.5cm. Drawing by Captain John. Ross. Coloured Engraving by Robert Havell. John Murray. London. 1819.pp138/139.

⁴⁹ Sir John Barrow Bart.F.R.S. *Quarterly Review*.21/24. January 1819. pp213 - 262.

⁵⁰ *View Directions Extracts. 1831 -1837*. Hydrographic Office Taunton UK.

⁵¹ Sir John Barrow Bart..F.R.S. *A Voyage of Discovery Made Under The Order of the Admiralty, in His Majesties Ships Isabella and Alexander*. *Quarterly Review* 21/41.1819. pp 213 - 262.

⁵² Commander William E. Parry. R.N. *Journal of a Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific in the years 1819 - 1820*. John Murray. London. 1821. Admiralty Instructions. P. xxviii. "Lieutenants Beechey and Hoppner whose skill in drawing is represented to be so considerable as to supersede the necessity of appointing a professional draughtsman".

⁵³ The inventory of H.M.S.Gripers equipment includes an electromagnetic chain to measure the effect of atmospherical electricity. *Journal of a Voyage for the Discovery of a North West passage etc* John Murray. London. 1821. Intro. xxxiv

⁵⁴ Commander William E. Parry. *Journal of a Voyage for the Discovery of a north West Passage from the Atlantic to the Pacific in the years 1819 -1820*. John Murray. London. 1821. p 98.

⁵⁵ Log of H.M.S. Hecla. 26th October 1819.S.P.R.I. 23/2/139.

⁵⁶ Russell A. Potter. *Arctic Spectacles. The Frozen North in Visual Culture, 1818 - 1875*.University of Washington Press. Seattle. 2007. P 56.

⁵⁷ Anthony Ashley Cooper. *Characteristics*. 1714. p 14

⁵⁸ Hugh Blair. *Lectures on Rhetoric and Belles Lettres*. 1738. p 214.

⁵⁹ *The Sublime; A Reader in British Eighteenth Century aesthetic theory*. Ed. Andrew Ashfield. Peter de Bolla. C.U.P. Cambridge.1996. p276.

⁶⁰ Michael Bravo. *Geographies of Exploration and Improvement: William Scoresby and Arctic Whaling, 1820 - 1822*. Journal of Historical Research 32. 512 - 538. Elsevier Press. 2006 .pp 351 - 352. 'Scoresby experienced a profound and mysterious sense of religion awakening or renewed in 1817 while on Jan Meyen Island in the Greenland Sea.'

⁶¹ Commander William Edward Parry.R.N. *Journal of a Voyage of Discovery of a North West Passage from the Atlantic to the Pacific performed in the years 1819 - 1820*. John Murray London 1821.p125.

⁶² Chauncey C. Loomis. *The Arctic Sublime in Nature and the Victorian Imagination*. pp 100 - 102.

⁶³ Frederick.William Beechey. *Situation of HMS Griper and Hecla July 4th 1819*. National Library of Australia. Nan Kivell Collection. T957 NK 3701/1 LOC 3292

⁶⁴ Commander William Edward Parry.R.N. *Journal of a Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific performed in the years 1819 - 1820*.John Murray. London. 1821. p 8.

⁶⁵ Commander William E. Parry R.N. *Journal of a Voyage of Discovery of a north West Passage from the Atlantic to the Pacific performed in the years 1819 - 1820*. John Murray. London.. 1821. p p10 - 11. 'Above the bergs the weather was clear but to seawards we saw rain and snow and heard a loud noise resembling thunder'.

⁶⁶ CommanderWilliam Edward Parry.R.N. *Journal of a Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific performed in the Years 1819 - 1820*. John Murray. London. 1821.p 9.

⁶⁷ Commander William Edward Parry.R.N. *Journal of a Voyage for the Discovery of a North West passage from the Atlantic to the Pacific performed in the years 1819 - 1820*. John Murray. London. 1821. p17. "From the soundings we obtained near (the berg) it must have been aground in 120 fathoms. - so that its whole height was almost 860 feet".

⁶⁸ Elizabeth Findlay. *Arcadian Quest. William Westall's Australian Sketches*. National Library of Australia. Canberra. 1998. p xv. 'The conservative Academician focussed on restraint and respect for the rules of classicism'.

⁶⁹ Commander William Edward Parry.R.N. *Journal of a Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific performed in the years 1819 - 1820*. John Murray. London 1821. p12.

⁷⁰ Commander William E. Parry.R.N. *Journal of a Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific performed in the years 1819 - 1820*. John Murray. London 1821. p255.

⁷¹ Sir John Barrow Bart. F.R.S. *Voyages of Discovery and Research within the Arctic Regions from the year 1818 to the present time*. John Murray. London. 1846. pp35-36. 'in this work we find no display of self importance, no attempt to deceive, or throw dust in the eyes of the public; no marvellous stories to disgust or confound and make the ignorant stare. No representation of objects the mere fantasies of the brain.'

⁷² Elizabeth Findlay. *Arcadian Quest: William Westall's Australian Sketches*. National Library of Australia. 1998. p 29.

⁷³ Russell.A. Potter. *Arctic Spectacles. The Frozen North in Visual Culture, 1818 - 1875*. University of Washington. Seattle. 2007. Notes to Chapters 1 - 6. Potter confirms this point with the author of the entry in the edition of the DNB for William Westall. 15th March 2005.

⁷⁴ William Marshall. *A Review of the Landscape, a Didactic Poem*. 1795. p. 276.

⁷⁵ Sir John Barrow. Bart. F.R.S. *Voyages of Discovery and Research within the Arctic Regions from the year 1818 to the present time*. John Murray. London 1846. "In this work we find no display of self importance, no attempt to deceive, or throw dust in the eyes of the public. No representations of objects the mere fantasies of the brain".p32

⁷⁶ Captain William Edward Parry. R.N. *Journal of a Voyage for the Discovery of a North West passage from the Atlantic to the Pacific performed in the Years 1819 - 1820*. John Murray. London. 1821.p 296.

⁷⁷ *Dictionary of National Biography. Earliest Times to 1900*. Ed. L. Smith and S Lee. Smith, Elder. Volume VII. p18

⁷⁸ Captain William Edward Parry. R.N. *Journal of a Second Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific performed in the years 1821 - 1822 - 1823. In H.M. Ships Hecla and Fury*. John Murray 1824. p.x. Most of the instruments were connected with astronomy and geomagnetism. A few with temperature and ice thickness measurement.

⁷⁹ Captain William Edward Parry. R.N. *Journal of a Second Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific performed in the Years 1821 - 1822 - 1823. In H.M. Ships Hecla and Griper*. John Murray. London. 1824 Pp499 - 501.

⁸⁰ Captain William Edward Parry. R.N. *Journal of a Second Voyage for the Discovery of a North West Passage between the Atlantic and the Pacific performed in the Years 1821 - 1822 - 1823. In H. M. Ships Hecla and Griper*. John Murray London. 1824 p. 118.

⁸¹ Captain William Edward Parry. R.N. *Journal of a Second Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific in the Years 1821 - 1822- 1823. Performed in H.M. Ships Hecla and Griper.* John Murray. London 1824.p 155.

⁸² The New Monthly Magazine. 1823. p.187.

⁸³ Captain William Edward Parry R.N. *Journal of a Third Voyage of Discovery for the Discovery of a North West Passage from the Atlantic to the Pacific.Performed in the Years 1824-1825 in H.M.S. Hecla and Fury.*John Murray.London.1826.

⁸⁴ Articles appeared in *New Monthly Magazine*. Vol 10. N.s. 1824 pp 453 - 460 and the *Mirror*. Vol 2. Supplementary. November 1823. p428. Barrow's review of this voyage appeared in *Quarterly Review*. October 1825.

⁸⁵ *Memoirs of the Wernerian Natural History Society for the Years 1826 -1831. Vol VI.* Longman, Rees, Orme, Brown and Green. Edinburgh. 1832. December 2nd 1826 p 560

⁸⁶ Captain William Edward Parry. R.N. *Journal of the Third Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific. Performed in the Years 1824 - 1825 in H.M.S. Hecla and Fury.* John Murray. London. 1826.

⁸⁷ Captain William Edward Parry.R.N. *Journal of a Third Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific. Performed in the Years 1824 - 1825 in H.M.S. Hecla and Fury.* John Murray.London.1826. p174

⁸⁸ Captain William Edward Parry. R.N. *Narrative of an attempt to reach the North Pole in Boats fitted for the purpose and attached to His Majesties Ship Hecla in the year 1827.* Quarterly Review 34.Lxxiv/4 1828. p525.

⁸⁹ Scoresby firmly advocated the use of lightly constructed sledges with reduced loads. His knowledge and experience of Arctic conditions and Greenland in particular, was ignored by the Board of Admiralty.

⁹⁰ Captain William Edward Parry. R.N. *Narrative of an attempt to reach the North Pole in boats fitted for the purpose and attached to His Majesties Ship Hecla in the year 1827.* Quarterly Review. 34. clxxx/4 1828. Plate facing p 90.

⁹¹ Sir John Barrow.Bart. F.R.S. *Arctic Voyages.* John Murray. London. 1843. Barrow dismisses the voyage 'as utterly useless' and of 'no public benefit' The sponsorship by William Booth, the Gin Distiller he suggests is purely to gain an honour.

⁹² Sir John Ross.R.N. K.S. *Narrative of a Second Voyage in search of a North West passage and of a Residence in the Arctic Regions. 1829,1830,1831,1832 and,1833.*A.W. Webster. London.1835. p.e.2 xxvii/iii

⁹³ Sir John Ross. R.N. K.S. *Narrative of a Second Voyage in search for a North West Passage and of a residence within the Arctic Regions. 1829, 1830, 1831, 1832, and 1833.*A. W Webster. London 1835. pp231 - 232..

⁹⁴ Sir John Ross.R.N. K.S. *Narrative of a Second Voyage in Search of a North West Passage and a residence in the Arctic Regions. 1829, 1830, 1831, 1832 and 1833.* A.W. Webster. London. 1835. p xi

⁹⁵ Sir John Ross. R.N. K.S. *Narrative of a Second Voyage in Search for a North West Passage and a residence in the Arctic Regions. 1829, 1830, 1831, 1832, and 1833.* A.W. Webster. London. 1835. P242.

⁹⁶ Boothia was named after William Booth a London Gin Distiller later awarded a Knighthood for his large financial sponsorship of the Ross expedition .

⁹⁷ Sir John Ross. R.N. K.S. *Narrative of a Second Voyage to search for a North West Passage and a residence in the Arctic Regions. 1829, 1830, 1831,1832, and 1833.* A.W. Webster. London 1834. p.xiii. This observation and others implies that Ross considered that a divine presence had saved them.

⁹⁸ Sir John Ross. R.N. K.S. *Narrative of a second Voyage to search for a North West Passage and a residence in the Arctic regions. 1829, 1830, 1831, 1832, and 1833.* A.W. Webster. London . 1834. p 603

⁹⁹ Ian .S. MacLaren. (ed. C. Stuart Houston).*Arctic Artist. The Journal and Paintings of George Back, Midshipman with Franklin, 1819 – 1822 .p. 275* “Midshipman Back provides an interesting exception to the pattern of heavily institutionalised interests in the literature and art of exploration and travel. Back’s personality complicates the balance of dutiful recording with those ambitious streaks that led him to show signs of the exhilaration of the artist or the poet“.

¹⁰⁰ Commander G. Fitzroy.R.N. *View Directions; Extracts 1831 - 1837. Drawings (1831).* Commander Fitzroy’s Orders. Hydrographic Office. Taunton. Somerset..

¹⁰¹ Barbara Maria Stafford. *Voyage into Substance. Art, Science, Nature and the Illustrated Travel Account, 1760 - 1840.* M.I.T. Press.Cambridge. MA. 1984. p 467

¹⁰² Philip Edwards. *The Story of the Voyage.* CUP Cambridge 2004. p222

¹⁰³ Professor Glyndyr Williams. *Arctic Labyrinth. The Quest for the North West Passage.* Penguin Books Ltd. London. p203. Franklin was not prepared for insubordination and dealt with them in the ‘strongest manner.’ One member of the

party Robert Hood was murdered by a voyageur and was in turn was shot by Dr John Richardson, the expedition surgeon and naturalist.

¹⁰⁴ Lieutenant George Back. R.N. *Private Diary*. March 13th.1820, McCord Museum Collection McGill University. Montreal.

¹⁰⁵ Captain John Franklin.R.N. F.R.S. *Narrative of a second expedition to the shores of the Polar Sea in the years 1825, 1826, and 1827*. John Murray. London.1828. Franklin writes of this location the ‘annexed accurate drawing taken by Lieutenant back from the highest point of the portage gives a beautiful delineation of one of the most picturesque scenes in the northern parts of America.’

¹⁰⁶ Captain John Franklin. R.N. F.R.S. *Narrative of a Journey to the Shores of the Polar Sea in the years 1819,1820,1821 and 1822*. John Murray London. 1822.pp xii- xiii E. Finden.(Engr.) *Expedition Passing through Point Lake on the Ice June 25th 1821. 14.1cm x 20.5cm.*

¹⁰⁷ Captain John Franklin.R.N. F.R.S. *Narrative of a Journey to the Shores of the Polar Sea in the Years 1819, 1820, 1821 and 1822*.John Murray. London. 1822. E. Finden.(Engr.) After George Back. *Expedition Landing in a Storm. August 23rd 1821.13.8cm x 20.2cm.*

¹⁰⁸ Edmund Burke. *A Philosophical Enquiry into the Origin of our ideas of the Sublime and the Beautiful*. Ed. J.T.Boulton. Routledge and Kegan Paul. London. 1958.p.132.

¹⁰⁹ Captain John Franklin.R.N. F.R.S. *Narrative of a Journey to the Shores of the Polar Sea in the years 1819,1820 ,1821 and 1822*. John Murray.London.1822. B. Audinet (Engr.) *Moore’s Bay, Polar Sea: lat 67.Deg.w48 Deg.N. long. With the expedition led by Captain John Franklin. 29th July 1821. (Midnight View). 14.0cm x 20.6cm.*

¹¹⁰ Sir John Barrow to John Murray.14th November 1822. Barrow File. John Murray Archives. Private collection of Virginia Murray. London.

¹¹¹ Sir John Barrow to John Murray.25th December 1822. Barrow File. John Murray Archives. Private collection of Virginia Murray. London. Edward Finden was retained for the next illustrated narrative of Arctic Exploration that Murray published, which was Parry’s *Journal of a Second Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific performed in the years 1821 - 22 - 23*. John Murray. London. 1824.

¹¹² Captain John Franklin. R.N. F.R.S. *Narrative of a second Expedition to the shores of the Polar Sea in the years 1825,1826, and 1827*. John Murray. London 1828. p184.

¹¹³ Captain John Franklin.R.N. F.R.S. *Narrative of a second Expedition to the shores of the Polar Sea in the years 1825, 1826, and 1827*. John Murray. London. 1828. Introduction. p.iv.

¹¹⁴ Captain John Franklin.R.N. F.R.S. *Narrative of a second Expedition to the shores of the Polar Sea in the years 1825,1826, and 1827*. John Murray. London 1828. Appendix VII p. cxi. Despite many recordings of position and extent there are no detailed drawings of the Borealis or descriptions. It is noted that 'colder weather affected the regularity and extent of the Arctic paraselene and Corona Borealis.(Luna Halo).'

¹¹⁵ Barbara Maria Stafford. *Voyage into Substance. Art ,Science, Nature and the Illustrated Travel Account. 1760 - 1840*. M.I.T Press. Cambridge. MA. 1984. p 422.

¹¹⁶ Captain John Franklin. R.N. F.R.S. *Narrative of a Second expedition to the Shores of the Polar Sea in the Years, 1825, 1826 ,and 1827*. John Murray. London. 1828. p121.

¹¹⁷ Captain John Franklin.R.N. F.R.S. *Narrative of a second Expedition to the shores of the Polar Sea in the years 1825, 1826 and 1827*. John Murray. London.1828. pp 169 - 170.

¹¹⁸ George Forster quotes Joseph Priestley's book. *History and present state of discoveries relating to vision, light, and colours*. J. Johnson. London 1772.

¹¹⁹ Captain John Franklin. R.N. F.R.S. *Narrative of a second Expedition to the shores of the Polar Sea in the years 1825, 1826 and 1827*. John Murray London. 1828. p. 157.

¹²⁰ G. Williams. *Arctic Labyrinth. The Quest for the North West Passage*. Penguin Books. London. 2010.p251.

¹²¹ Captain George Back. R. N. *Narrative of the Arctic Land Expedition to the mouth of the Great Fish River and along the shores of the Arctic Ocean 1833 - 1834*. John Murray. London. 1836. Back thought, 'from an inspection of the maps traced by Indians that the mouth of the river lay less than 300 miles from the wreck of the Fury'. Page xii.

¹²² Captain George Back. R. N. *Narrative of the Arctic Land Expedition to the mouth of the Great Fish River and along the shores of the Arctic Ocean*. John Murray. London. 1836. Appendix IV. The Geological Notice appended by W.H. Fitton M.D. F.R.S. G.S. takes special note of 'the occurrence and thickness of sand deposits in this part of North America.' He believes that they are 'well deserving enquiry as to whether the deposits are accumulations left by recent seas in their temporary occupation of that continent or belong to a tertiary or secondary group of strata.' This investigation was a small part of the controversial work

being undertaken by Professor Forbes of Edinburgh and others, to demonstrate the geological structure of the earth and the effect of ice ages on its long evolution.

¹²³ Captain George Back. R. N. *Narrative of the Arctic land expedition to the mouth of the Great Fish River and along the shores of the Arctic Ocean*. John Murray. London. 1836. pp 71-72.

¹²⁴ Captain George Back. R. N. *Narrative of the Arctic Land Expedition to the mouth of the Great Fish River and along the coast of the Arctic Ocean*. John Murray. London 1836. p 409 / 415.

¹²⁵ *The Athenaeum*. London. August 22nd 1835.

¹²⁶ Captain George Back. R.N. *Narrative of an expedition in H.M.S. Terror undertaken with a view to geographical Discovery on the Arctic shores in the years 1836 -1837*. John Murray. London 1838. p 13.

¹²⁷ Captain George Back R.N. *Narrative of an expedition in H.M.S. Terror undertaken with a view to geographical Discovery on the Arctic shores in the years 1836 - 1837*. John Murray. London 1838. p11.

¹²⁸ Captain George Back.R.N. *Narrative of an Expedition in HMS Terror 1836 - 1837*. John Murray. London, 1838. pp26, 27.

¹²⁹ Chauncey C. Loomis. *Nature and the Victorian Imagination. The Arctic Sublime*. California Press. Berkeley. California.1977.p 102.

¹³⁰ Barbara Maria Stafford. *Art, Science, Nature and the Illustrated Travel Account, 1760 -1840*. MIT Press. Cambridge. MA. 1984 p 367. Stafford also suggests that at this time a 'solemn stillness' was believed to be congruent with the pictorialisation of original creation and as such, unseen and unspoiled..

¹³¹ R. J. Le M. Mclure. R.N. *Private Journal of a Voyage of Discovery on Board H.M.S. Terror. June 1836 - September 1837*. Royal Geographical Society. London. *AR SSC/106/ pt 1.

¹³² *Blackwood's Edinburgh Magazine*. Vol. 9. No. 50. June 1821.

¹³³ Captain George Back. R.N. *Narrative of an expedition in H.M.S. Terror undertaken with a view to geographical Discovery on the Arctic Shores in the years 1836 - 1837*. John Murray. London. 1838. p 153.

¹³⁴ Captain George Back. R.N. *Narrative of an expedition in H.M.S. Terror undertaken with a view toGgeographical Discovery on the Arctic Shores in the years 1836 - 1837*. John Murray. London. 1838.p 131.

¹³⁵ Captain George Back. R.N. *Narrative of an expedition in H.M.S. Terror undertaken with a view to geographical Discovery on the Arctic shores in the years 1836 -1837.* John Murray. London. 1838. p 405.

¹³⁶ *The Athenaeum* and the *London Examiner*. Saturday July 14th 1838.

¹³⁷ *Journal of Belles Lettres, Arts Sciences etc. Review of New Books.* No 1121. London. Saturday 4th July. 1838.

¹³⁸ W. M. Ivens. *Prints and Visual Communications*. Routledge and Keegan Paul. London. 1953. 'The advantage of lithography was that the artist's drawing and the print were practically identical - there was no reworking of his drawing by another hand. It afforded also the most complete gamut of tones between white and black and achieved them with the greatest ease and it did away with the middle man engraver with his inevitable systemized grammar and syntax of linear webbing.'

¹³⁹ Captain George Back. R.N. *Narrative of an expedition in H.M.S. Terror undertaken with a view to Geographical Discovery on the Arctic shores in the years 1836 - 1837.* John Murray. London. 1838. p409.

¹⁴⁰ Sir John Barrow. FRS. *Voyages of Discovery and Research within the Arctic Regions from the year 1818 to the present Time.* John Murray. London. 1846. " it is perhaps, not generally known that the late Voyage towards the South Pole under the command of Captain J.C.(now Sir James) Ross had no other object but the advancement of science and general information regarding the Antarctic Regions of the Globe." p323

¹⁴¹ Stamford Mercury. Friday 19th April 1839. The same article refers also to the invention of Sir John Herschel's instrument for measuring the intensity of light which is 'twice as great at the Cape as in this country.' It is shown that the expedition scientists were instructed to measure light intensity at the Cape, St Helena and other Southern Ocean landfalls..

¹⁴² *Blackwoods Magazine*. 497. Vol. 81. March 1857 p 372.

¹⁴³ Copy Letter Book of H.M.S. Erebus. Letter 330 RFP. N.M.M.

¹⁴⁴ Captain Sir James Clark Ross.R.N. *A Voyage of Discovery and Research in the Southern and Antarctic Regions during the years 1839 - 1843.* John Murray. London. 1847. Vol. 1 p 217.

¹⁴⁵ The London Illustrated News. No.112. Saturday the 22nd June. 1844. This is almost the only account published in the press of the expedition and its discoveries both scientific and territorial.

¹⁴⁶ John E Davis.R.N. *A Gale in the Pack. 80th January 1842.*and *Erebus passing through the Chain of Bergs. 13th March 1842.* (Eng. T. Picken.) p.170.and p220.

¹⁴⁷ Samuel Scott. *To the Ends of the Earth, Painting the Polar Landscape*. Exhibition Catalogue, Peabody Essex Museum .Salem.2009. pp6-7.

¹⁴⁸ Captain Sir James .C. Ross. *Voyages of Discovery and Research in the Southern and Antarctic regions during the years 1839-1843*. John Murray. London. 1847.

¹⁴⁹ Captain Sir James Clark Ross. R.N. *Voyages of Discovery and Research in the Southern and Antarctic regions during the years 1839 - 1842*.John Murray. London. pp 168 - 169.

¹⁵⁰ Captain Sir James Clark Ross. *Letterbook. Letter to the Lord Commissioners of the Admiralty. No 288. 3rd May 1842. Port Louis, Berkeley Sound, Falkland Islands*, S.P.R.I. Cambridge.GB 15 MS 1556 - BJ.

¹⁵¹ *The Illustrated London News. Antarctic Christmas; or a Diary under Canvas*. December 31st 1859.Vol. 648.

¹⁵² John Wilson Carmichael.R.A. *H.M.S. Terror and H.M.S. Erebus in the Antarctic*. Oil on Canvas. 123.2 x 200.3 cm. N.M.M. BHC 1215.

¹⁵³ Diana Villar. *John Wilson Carmichael. 1779 - 1868*. Carmichael and Sweet. Portsmouth 1995. Villar quotes from notes used by the artist for this painting. 'The mountains which take their rise at the sea at Cape Byam Martin in the east and from a low plain near Catherine's Bay in the west terminate in sharp lofty peaks that are too perpendicular for the snow to rest upon. A day spent beating to the westward to Victoria land'. These were from narrative by Captain William Edward Parry's from the third Voyage in 1827.

Chapter Two

That far distant and mysterious Region.

This chapter will examine the Polar themed public shows and entertainments presented in Britain between 1819 and 1850. These productions described themselves as panoramas, dioramas, and hemiramas of which some were static shows for large auditoria and others with moving scenery for smaller venues, described as ‘perestrephic.’ A number of chosen expeditionary themes also formed part of exhibitions on large outdoor sites, including Vauxhall Gardens in London. Initially created to address the minority British interest in travel existing in the late 18th Century they became, when established, a large commercial enterprise until the middle of the 19th Century.¹

The extant visual record is limited because of the fragility of the painted canvases for ‘perestrephic’ shows which moved on rollers around curved surfaces, damage resulting from travel between large cities and towns, and a failure by showmen and artists to keep records of their work. This examination is therefore limited to those scenes by voyage artists on which the entertainments were based, compared with written descriptions in programmes and newspaper or magazine reviews. Other sources available include publicity handbills, key

plates explaining constituent elements in each display, and notes by scene painters. Where correspondence between naval personnel and scene painters exists this is used to explain special effects or features. This chapter is divided into three sections. First I shall examine the chief reasons for the popularity of Polar themed shows amongst the British public during the first half of the 19th century. Secondly the conflict between Admiralty insistence on objectivity in the official voyage record and interpretations by showmen and their contracted artists to combine authenticity with interest and excitement for the public. This section reviews the productions opened between 1821 and 1834.

The third section considers the Arctic spectacles opened between 1834 and 1854 and also examines reactions and observations from theatrical critics, the media, the viewing public and the British art establishment to ‘all embracing views’ and the part they played in the interpretation of ice in the first half of the 19th century.

Section 1. *The ‘all embracing view’ and the Arctic regions.*

Chauncey C. Loomis in *The Arctic Sublime. Nature and the Victorian Imagination* proposes that Arctic exploration aroused particular expectations in Britain because it was seen as a national enterprise. It represented various scientific, geographical and strategic interests.² British prestige was felt to be at stake in the successful pursuit of these aims but there were other aspects that also invited a peculiar interest from the public. An allegorical *trope* surrounding the Arctic region which stimulated romantic and spiritual associations. As Alpine mountains and glaciers became better known through the paintings made by travelling artists through the late 18th century, the ice and snow of Polar regions scarcely explored or mapped at that time, became involved with a new empirical enquiry into the natural world. ‘A world in which to be puzzled, amazed, astounded and enthralled by the very differences from their own world.’³

The start of this Polar enquiry and development began among educated people in British society, and was first espoused by the Scottish didactic poet, James Thomson with *The Seasons* published in 1726.⁴ Authors and poets had historically portrayed mountains under snow and ice as ‘dreadful’ but Thomson, in the introduction to his poem dedicated to *Winter*, observed that he ‘knew of no subject more

elevating, more amusing and more ready to awaken the Poetical Enthusiasm and the Moral Sentiment than the works of Nature.’ He redefined the role of ice not as the backdrop to human moral drama but as possessing a natural importance all its own, and more radically, as contributory to the moral conduct of nations set within the ‘frigid zones.’⁵ The *Excursion* written by David Mallet and published in 1728, refers to ‘the glittering waste of Polar Ice, the Hill upon Hill of eternal Ice and Snow,’ agreed with Thomson’s opinion that nature represented ‘a force at once spiritual and natural, binding the members of the system together and determining their status and direction.’⁶

The Seasons proposed that the most romantic and sublime landscapes, mountains and wild landscapes, directly connected with important philosophical questions about self identity and human existence inside the fullest interpretation of Gods’ universe. The writers, poets and artists of the Romantic period in Europe found in such a new proposition ideas and themes capable of development into popular works for a ‘tasteful’ public.⁷

An increasing number of the public wanted to learn about the geographic features on the world’s surface, natural history in far away countries and explanations for unusual atmospheric events such as dense fogs.⁸ Natural philosophy was evolving into specialist scientific

disciplines. Meteorology, geology, glaciology, and geography from which came from replicable observations and experimentation sets of new hypotheses on which interrelationships in nature could be explained. A depth of study that Thomson applauded, and which Baron Alexander Von Humboldt (1769 - 1859), helpfully re defined in his explanation of the mechanisms of the natural world in *Die Lebenscraft oder der rhodische Genuis, eine Erzahling*, 1795. This work being especially influential amongst artists, writers and philosophers such as Thomas Cole (1801 – 1848), and Johann Wolfgang von Goethe (1749 – 1832).

The opportunities for illustrating and explaining such theories in articles for mass audiences in magazines and newspapers were limited by the quality of print and capability of those media. Exhibitions of sketches and more finished works were confined to private houses and exhibitions mainly suitable for connoisseurs, collectors and the scientifically inclined. The ‘tenfold frost’ of Polar landscape with emptiness and silence, its complete isolation from any civilized society and the ghost like landscapes with icebergs, were all unique to the Arctic and the Antarctic, incomprehensible to readers in terms of their purpose in any order of the world..⁹ Loomis suggests that they were at this time ‘unearthly in their sublimity’ and needed

consequently a unique form of aesthetic translation.¹⁰

The scenery of the Arctic region had certain advantages over other travel subjects for theatre presentation. They were suitable for new and experimental kinds of illumination, a key element in the visual culture of the early to mid 19th century.¹¹ Panoramas on Polar subjects could use effects that contrived to authenticate several special ‘unearthly’ qualities such as the *aurora borealis*, *parheliae*, and *parhelion*, placed within absolute darkness of winter, the ice ‘blink’ and aspects of new stars and galaxies discovered in the northern most sky. These were all imaginative ingredients that with ingenuity, colour, and reflected light, could credibly reproduce the true and the ‘fugitive’ effects for Arctic locations. The practical benefits included detailed reports by naval officers which could be used to authenticate any production. Any scientific results taken from these reports could also be claimed as a part of the educative value for the public. These explained differences between geographic and magnetic Poles, the purposes of lunar observation, subjects of botanical interest and causes of the ‘iceblink.’ Topics that represented in the mind of the British public a noble quest, an extension of British influence in the world and thus an enhancement to national identity.¹²

Section 2. *Arctic Shows and the representation of ice by naval artists.*
1818 -1834.

Between 1818 and 1883 in Britain there were 60 different Arctic shows including twenty two moving panoramas, eight fixed panoramas, four theatres with mechanical automata and four exhibitions of Eskimaux groups with various artifacts. These were entitled as displays of ‘Arctic Natives.’¹³ The first recorded description of Polar ice in a theatrical setting was the panorama produced by Robert and Henry Aston Barker for the larger gallery in his purpose built theatre in Leicester Square, London.¹⁴ This was called *View of the North Coast of Spitzbergen* (**Fig 2.1**) which opened on the 12th April 1819 being based on the voyage of H.M.S. Trent and H.M.S Dorothea in 1818. The smaller upper gallery showed *A View of Lausanne and the Lake of Geneva* an association between two topical subjects and to exploit the success of *Frankenstein* by Mary Shelley published in 1818.¹⁵ The Spitzbergen panorama occupied a space eighty four feet six inches in diameter and thirty five feet nine inches high.* Construction was round a raised central viewing platform and a key plate fold out used in the programme explained views to the south and another to the north from the position of the audience. Each used a

* This represented 10,000 sq feet of canvas. Denise B Oleksijczuk. *The First Panoramas. Visions of British Imperialism.* p 4

number for the different features of interest.

The south view included scenes with walrus being chased by sailors reminiscent of the Webber voyage painting, *Party from HMS Resolution shooting Sea Horses. 1778.* (**Intro Fig. 11**). These are described as ‘monsters’ and, ‘hideous animals... the eyes are small and sunk in the head; the lips fat and beset with long bristles.’¹⁶ Two polar bears are in this view with crew members aiming guns and others attempting to shoot sea birds. The scenery painted behind them is from Frederick Beechey’s watercolour *Red Hill, S. by S.E. on the 15th June 1818.* (**Fig. 2.2**). The ships, H.M.S. Dorothea and Trent, were caught in ice under *Red Hill* (**Fig 2.3**) **Chart of Expedition to Spitzbergen. 1818. Red Dot 3.** The glaciers are included and the ‘cloven cliff,’ topographical features of special interest. The key plate does not conform to the watercolour of Beechey with regard to the placing of the two ships, which in the northern view of the panorama have no land behind them and are brought closer to the foreground, Here the intention seems to have been to let the audiences have a closer view of ships and officers to make them feel engaged with the drama of the situation. The clothing and faces of figures are artificially increased in size, helping everything in the northern view appear closer to the audience forty feet away. The icebergs in the distance in

the southern view calculated to be four hundred feet high made the distances and scale of features seem greater. Perspectives for panoramas exaggerated distance but not intentionally to confuse the audience. The various treatments were conveniently consistent with the technical requirements, space available, the position of the audience and a desire to include as many objects within the circle of the horizon as possible and with ‘painstaking fidelity.’¹⁷

Vogel Sang SE by S in July 1818 (**Fig 2.4**) recorded by Frederick Beechey was the source for the scene painter of the appearance of the steep snow covered cliffs and calm sea. This was painted near to *Red Hill*. (**Fig 2.3**) **Red Dot 2.** and included information enabling him to gain interest without reducing accuracy or objectivity excepting only the true distances between events.

Barkers’ *Spitzbergen* panorama included the scientific projects in the north view with the Union flag included to identify the national importance of their work. The panorama also includes wild life with familiar species like polar bears, seals, whales and walrus and extends this to give details of different seabirds and their diet..

The descriptions of the ‘ice blink’, shown in the centre distance of the northern view, provided a simple explanation for the audience even though meteorology in the specific context of the Arctic region had

scarcely begun.

The ice shown in this production compared with the voyage account, has little evidence of its destructive power in the northern most waters off Spitzbergen. The voyage had to be abandoned in 1818 because of damage caused by large pieces of sea ice. Objectivity in the production could therefore be questioned on this account but Admiralty censorship may have prevailed to ensure that content should stress the positive aspects and not the failure of the expedition to achieve its goal. The Barkers had a long tradition of working on naval scenes helped by the Admiralty.¹⁸

An Arctic production by the Marshall Brothers opened in 1821 using material from John Ross who had sailed into Baffin's Bay and up Lancaster Sound but explored no further west as ordered,(See Chapter 1), A voyage described by John Barrow, second secretary to the Admiralty as a 'pleasure cruise.'¹⁹

The Marshall production was 'perestrephic.' A version that moved in front of the audience on a curved surface. The title *The Perestrephic Panorama of the Sublime Scenery of the Frozen Regions, with eight views of Captains Parry, Ross, Franklin, and Buchan's Voyages of Discovery in the Polar Regions*. It is thought to have used effects of sounds and special lighting.²⁰ Neither key plates nor programmes

survive, but from the advertising handbills and press reviews, it apparently included Eskimaux, red snow, and the ceremonial possession of Cape Byam Martin in the name of the Crown.

New scenes from the Spitzbergen expedition for this production but not originally chosen by Barker, were from two watercolour sketches by Frederick Beechey.²¹ *The Expedition driven into the Ice* (**Fig 2.5**) and *Situation of H.M. Brig Trent. June 7th 1818* (**Fig 2.6**). Between the 11th to the 14th September 1818 the ships were driven into the pack ice. See (**Fig 2.3**) **Red Dot 4**. The tumbling motion of the sea and its jagged ice has a frightening appearance likely to overwhelm the *Trent* in the centre ground. The narrative by Beechey describes the heavy blows his ship received and the ‘clanging of the ships bell which cast an awful dirge like sound amidst the roaring of the wind and water.’²² A perestrepthic panorama such as the Marshalls’ could simulate waves and their threatening ice floes even though factual and educational information for an audience was made more difficult since the scenery constantly moved. The authenticity of their content was claimed by the Marshalls with copies of letters given firstly by Beechey to Barker approving his scene paintings, tactics generally resorted to by unscrupulous showmen.²³

The British public were encouraged to view the various productions

through endorsement by a senior naval officer and expected over time to see ships frozen into snow and ice, remarkable icebergs, coastlines named for the Crown and commanders who were celebrities leading their ships and crews sometimes hunting wildlife or otherwise engaged in science. To satisfy the demand for new versions of this content, the Marshall brothers and J.B. Laidlaw modified their productions by ingeniously manipulating lighting and sound effects and by live commentaries. From 1822 some exhibitions travelled accompanied by native people from Lapland and Iceland as well as Eskimaux who were in *tableaux* displaying ‘collections of natural and artificial curiosities from those almost unknown regions.’²⁴

The successful *Spitzbergen* panorama in London, which ran for three years, was followed by a production in Covent Garden Theatre using the Scottish scene painter David Roberts R.A, 1796 - 1864, called *Robert's Moving Diorama of the Polar Expedition: being a series of views representing the progress of his Majesties Ships Hecla and Fury in their endeavours to discover a North West passage from the Atlantic to the Pacific Ocean*. This consisted of eight separate views showing the results of Edward Parry's first three expeditions to find the North West passage, described in Chapter 1. Staged between December 1829 and February 1830 it was advertised as popular Christmas family

entertainment in the same tradition of O'Keefes *Omai*, or, *A trip Round the World* 1785. designed by Phillip de Louthembourg the inventor of the *Eidophusicon*.⁺

The employment of Roberts, the renowned travel painter, suggests that Covent Garden had wanted to stage a serious and informative production. The show opened after the departure of John Ross in the summer of 1829, on his privately sponsored voyage aboard the *Victory* again in search of the North West passage. See Chapter 1.

When Ross returned in 1834 after four years absence, interest in Arctic spectacles and shows was renewed and lasted in Britain until the mid 1850's. Ross used the public response to his voyage to direct personal advantage, helping him to restore his reputation and to achieve national fame and a knighthood. The incorrect naming of Boothia as an island or continent separate from Canada, solely to reward Felix Booth his financial sponsor, was an example of his pragmatic opportunism.

The first fifteen years for the panoramas came to develop and define the ice and Arctic exploration as the setting for uniquely special and British heroism. The peculiar 'likeness's' and sizes of icebergs, the

⁺ Francis Spufford states that de Louthembourg used the drawings from Cooks official artists and used a revolving stage to bring an iceberg on castors into view I may be some time. Faber and Faber London. 1997. p 47..

desolation of the landscape and the mysterious missing parts of the explorers maps giving weight to this notion. Associations with death from drowning, freezing or shipwreck or all three were mostly ignored either because panorama audiences were family audiences or because until the 1840's the Royal Navy suffered no substantial casualties. A national commitment for the discovery of a North West passage was created by the optimism of officers who openly stated that such a route would be found and by repeated claims that the scientific value of the work was significant. Other themes infiltrated the content of the shows which affected not only public perception of the Arctic and ice but the intrinsic value of this remote territory and its native people.

Section 3. *Arctic Shows and the representation of ice by naval artists.*

1834 - 1854.

The panorama advertised as *Description of a view of the Continent of Boothia, discovered by Captain Ross, in his late expedition to the Polar Regions* is described by the key plate (**Fig. 2.7**). It opened in 1834 and was painted by Henry Courtney Selous, (1803 – 1890), and Robert Burford (1791 – 1861), the new owner of the Barker's original Panorama building in Leicester Square. The plate shows the points of special interest which included the location of the North Magnetic Pole, his discovery and naming of the 'Continent' of Boothia, an Eskimaux village and *Illictu* the chief of its inhabitants and several of the harbours made for *Victory*. This production sought to show all the events of the four year long voyage which was only possible by telescoping not only disparate places, but the time spent at each. It was described enthusiastically in the programme as, 'everything all at once.'²⁵ .

The fact that *Victory* moved only a few miles from where it reached the first season, did not prevent the display showing the entire known areas of the eastern approach to the North West passage.²⁶ Land as far apart as King William Land, the furthest point west yet discovered two hundred miles from *Victory's* location, as well as outlines of Hecla and

Fury Island 100 miles to the south east. Henry Selous guided by John Ross, included each place the *Victory* had over wintered for three successive seasons. Felix Harbour, 1829 -1830, Sherrifs Harbour, 1830 - 1831, and Victory Harbour, 1831 - 1833 where the ship was finally abandoned. These places were close to each other geographically but this was not made apparent in the panorama. Nor could the audience see them all at one time. The accuracy of their true route and the distance actually covered was disguised to help ensure the 'residency' and their dramatic escape became the most important and memorable parts of the story for several crucial commercial and personal reasons.

Russell Potter describing this illusionary quality in the key plate drawing as a sign of the intention to make the finished panorama a panopticon emphasising the desolation and emptiness of the polar scenery.^{*} The key shows a resemblance to Henry Ashton Barker's 1819 production though with a much enlarged horizon.²⁷ The foreground is full of angular and tumbled masses of ice boulders and cliffs. The open spaces are occupied by figures brought closer to the audience so they can identify each individual. The middle ground is level with the frozen over sea in which *Victory* has been buried behind

^{*} Panoptic (Gr.paenoptik) meaning 'all embracing, taking all aspects in a single view.' Collins English Dictionary. Collins. London 2009.

protective snow walls. The edges of distant low hills are only faintly represented to help increase the sense of distance between the viewer and the horizon. The ships and the figures are all made to appear insignificant in the wide expanse of ice and snow.

Audiences using the programme key could recognise Ross in Polar dress pulling along a one legged Eskimaux, *Tullooachin*, seated on a sledge whilst more of the crew are pulling *Illictu* chief of the tribe. As Robert David comments, depictions of native people were uncommon up to this time in panoramas which were ‘designed to reveal the bravery and exploits of British explorers.’²⁸ One achievement John Ross wished to be recognised for was the friendly relationship he created with the native people in newly discovered territory. These locations he considered were suitable for proper settlement at a future date to becoming colonial outposts with a trading relationship with the Eskimaux residents and to civilize them necessarily. The subject was a step away from panorama content of the first period by this objectivity towards native people.

The discovery of the North Magnetic Pole, important to navigation and compass adjustment in high latitudes, is shown by the flagpole flying the Union Flag. Finding the location was scientifically helpful although a time limited achievement, much celebrated by the press

and public who mistook the site as that of the geographical Pole. The other scientific aims for the voyage were given references on the key plate for three separate observatories. These observatories and the importance of astronomy was reflected generally in the panorama content by the use of two thirds of the entire vertical space for sky, showing the *aurora borealis*, many constellations of stars and combinations of colours all of which created a positive and memorable sublime canopy over the setting.²⁹

The press reviews for the show are enthralled by the combinations used for both the ice created mists and the sky. ‘The vast and clear firmament of the northern sky studded with myriads of stars of such refulgent brightness, that to the eye of the beholder they actually appear to scintillate’.³⁰

One feature much commented upon and of most ‘immediate notice’ is the treatment of light in the sky which, ‘during the depths of winter, when the sun is not apparent above the horizon and the light afforded for illuminating the objects presented to view, proceeds from the reflection of the mists of the atmosphere from the brilliant stars that are twinkling overhead and from the splendid Aurora Borealis.’³¹

The *aurora* both a captivating and important object of wonder in this view, employed ‘blue gold colour, partially tinged with green and to

pink shooting upwards in coruscations in one continuous horizontal line.’ A reviewer in the *Morning Post* reached the unexpected conclusion concerning this production. ‘The first glance of this famous view of the snowy regions of the north does not answer the expectations formed of it. The scene does not inspire that shuddering expectation of cold which the portraiture of a domestic wintering place in 70 Degrees north latitude might be expected to create. This may be accounted for by the rich crimson glow of the sky reaching several degrees above the southern horizon and, on the other side in the northern hemisphere, the *Borealis*, both of which tinge the interminable fields of snow and ice with various colours and an appearance of warmth at variance with the true character of the place.’³²

The reason for the feeling of ‘warmth’ is perhaps clear. This referred partly to a brilliance of stars spaced authentically across the canvas, but mainly to the sky tones developed in the production.³³ The connection between a ‘vast and clear’ firmament and the ice below was enthusiastically described later as combining to help convey a ‘solemn stillness perfectly in accordance with the awful aspects of the scene.’³⁴

The scene *Victory in Felix Harbour* (**Fig 1.43**) painted by John Ross,

shown in the coloured engraving by William Say, shows a crimson glow from the *aurora* which was probably used in the sky section painted by Selous. The artist's frequent difficulties with the treatment of the light from the stars and their exact positions in the northern sky, are recorded in his journal whilst his preparations were checked daily by John Ross for accuracy.³⁵ The *Times* reviewer admits to being drawn in an 'upwards yearning of his gaze into a light that shone upon a realm disjunct from earth itself.'³⁶ He goes on to say 'it is almost impossible by verbal description to convey an accurate idea of this exhibition' having previously admitted that the 'subject matter would doubtless appear strange to his readers in that this spot is only associated in our minds with ideas of gloom and desolation.'³⁷ These powerful impressions of colour in Arctic scenery were a startlingly new proposition for the public to understand.

The *Times* article noted the inclusion of the Boothian Eskimaux with the settlement of eighteen snow huts called a 'village.' This based on the painting by John Ross, *North Hendon; Snow Cottages of the Boothians*, (**Fig 1.44**) The cottages are placed below the hill used as one of the expedition observatories to help emphasise the discrepancy between the science of the British Empire and the primitive living conditions of the native tribes. The gradual increase in the use of

Eskimaux settings showing their fishing and hunting techniques and equipment, their *iglu* and their friendliness to the white explorers, can be read as an expression of growing audience interest in their way of life. One example of their emergence as important subject material is a handbill for the *Linwood Gallery Leicester Square. Grand Moving Panorama of the Arctic Regions.* (**Fig 2.8**) which specifies an account of their ‘extraordinary manners and customs’ even though Sir John Franklin and his disappearance was the central object of public interest.³⁸ J. B. Laidlaw, a prolific producer of Arctic shows, produced his own version of the *Boothia* panorama in 1836, once more borrowing from the original sketches by Ross, and incorporating also his native people. *Study for Moving Panoramas.*(**Fig 2.9**)

In summer 1834 *A Grand Scenic Representation of Captain Ross's Exhibition to the North Pole*, (**Fig 2.10**) opened at Vauxhall Gardens London.* The exhibition included *Victory* in the ice, polar bears, a tribe of Eskimaux constructed out of snow, a giant iceberg seventy feet in height, and a full sized replica of the *Isabella* of Hull, the whaling ship that rescued John Ross, 150 feet in length. A poster for the exhibition announced that the finale was an ‘awful thunderstorm

* See Cole and Borg. *Vauxhall Gardens. A history.* YUP London 2011. This landmark played a large part in the communication of discoveries, national events and populist topics. It assembled live performances with ‘cosmoramas and peepshows. John Ross’s original exhibition in the Gardens was in 1823. It was so popular it had been ‘much repainted.’ P. 298

and the appearance of a gigantic image of Captain Ross in his Polar Costume rising from amidst the Icebergs.’³⁹ A preview in the *London Evening Standard* on the 28th May 1834 described it as occupying sixty thousand square feet of space but declined to explain or to rectify the mistake in the exhibition title between the geographic Pole and the magnetic Pole. A publicity broadsheet does however try to make the distinction clear. **See Appendix 2.**

The review of the *Morning Chronicle* praised the ‘sublimity and fidelity of effect standing forth unrivalled - defying, in fact, any competition of art.’⁴⁰ Another expressed admiration for the treatment of the representation of the Aurora Borealis ‘contrived by the chemical application of different gasses under the direction of a very skilful foreign chemist.’⁴¹

John Ross and Robert Wardell the director publicised the event by strongly promoting authenticity; ‘whether considered a Work of Art, what is of much greater importance at the present moment, was faithful delineation of the frozen regions in which various Artists have surpassed his (Ross’s) most sanguine expectations.’ The title the ‘correct idea of the scenery of the Polar Regions’ was stressed in order to satisfy public desire for realism and objectivity.

The Exhibitions and panoramas that followed the Vauxhall spectacle

copied themes from both Burfords show and the outdoor version, including Mr. E. Lambert's *Arctic Diorama* at the Queens Bazaar in 1834.⁴² One attempted to combine parts of every Arctic expedition to date into one show to the derision of the critics.⁴³ These ambitious treatments may have generated new public support for more ambitious naval expeditions into the Arctic, already being contemplated by John Barrow. In all eight new stage and perestrophic productions were created between 1834 and 1850. One theme came to dominate these later productions. The repeated searches for Sir John Franklin who had sailed in 1845 to complete last sections of the Arctic map. **(Fig 3.1.)**

Chart Shewing discoveries made by British Officers in the Arctic

Regions 1812 – 1826. Many theories were proposed by newspapers and the popular illustrated magazines as to why he had not yet returned. Robert Burford with Henry Selous as his chief artist, created a panorama showing the naval searching expedition led by James Clark Ross between 1849 - 1850, which was prevented from following Franklin's last known route by exceptionally heavy ice.

The scenes used for their panorama were based on watercolour drawings by the naval artist William. H. Browne R.N.(cf.1850).⁴⁴ This panorama was called *View of the Polar Regions. Description of Summer and Winter Views of the Polar Regions as seen during the*

Expedition of Captain James Clark Ross in 1848 -1849. (**Fig 2.11**).

Divided between two circular scene paintings which were composite views it showed the expedition in summer and in winter months. The standard programme key refers to special features in each.

The scenery in the summer view shows a glacier rimmed anchorage on the West Greenland seaboard and combines the watercolour sketches by Browne, *Valley of the Glaciers* (**Fig 2.12**) Key Plate 5, *Moored to an Iceberg* (**Fig 2.13a**) Key plate 2 and *Coast of North Somerset, Regents Inlet near Cape Leopold. 1849.* (**2.13b**) Key Plate 6. The summer view as described in the programme is ‘dark and frowning summits of rock.... bleak deserts of the ocean... towering icebergs of gigantic size all heaped together in the wildest disorder.’⁴⁵ The audience is brought forward into the panorama by the adjusted perspective increasing size and detail in the foreground, such as some boats with men hunting a bear, and James Clark Ross the Commander being rowed away from the *Enterprise*. The popular subject matter of the ‘singular’ and ‘enormous’ iceberg, and the ‘stupendous’ glacier are in the centre of the middle ground. The notes for this section refer to the remarkable appearance of the sky although this is not easy to determine from the key plate. An illustration conceivably taken from Browne’s coloured sketches which he describes as having ‘vivid

emerald, violet tints, intense blue and crimson light,' colours similarly described for the 1834 panorama also devised by Burford and Selous.

This summer view showing much activity contrasts with the winter view in which both ships are in Leopold Harbour amongst the 'interminable waste of ice.' Burford wished the overall impression given by both scenes was of 'awful grandeur' and uses deep dark and sinister shadows created by the moonlight for the winter view. The *aurora borealis*, a key element, occupies a large section of the horizon with the programme note that describes its appearance as 'many colours and shapes, vividly darting in brilliant coruscations towards the zenith.' The significant place, size and dominant presence it represented in this production could indicate a suggestion by Barker to his audiences that over this horizon, the missing expedition is waiting for help.

Most of the ideas and *motifs* from Arctic show material are almost inevitably included; a 'remarkable floating iceberg', crews and officers moving between the ships continuing the important scientific work or hunting for fresh game and constantly looking for evidence of Franklin's route. These promote audience optimism that despite the treacherous ice, the appalling cold and months of darkness, dedicated expeditions such as these could manage Arctic winters if the crews

were well prepared and led. There is by implication a feeling that Franklin who was both of these, might still be alive even though he had been away from Britain for five years. The mood of Providential salvation given by the *aurora* was employed by the *Illustrated London News* and similar magazines which steadily replaced panoramas with more topical news coverage. These published much of the earlier expeditionary account material and re-emphasized the main Arctic themes concerning the ice with similar insistence on the naval sources for the integrity and authenticity of coverage. See Chapter 3.

The work of Frederick Edwin Church (1826 – 1900) the American landscapist and follower of Baron Humboldt, made a voyage to Labrador and Nova Scotia in 1859 to paint icebergs. His large canvas *The Icebergs* (**Fig 2.14**) was the result. The scale of this painting, intended to be seen on its own using opera glasses, has been compared to that of a small panorama. It was exhibited in cities across the United States and eventually in London in 1864. The precise detail in his work includes glacial morphology for ice bergs, the range of fugitive effects and symbolic wreckage from a ship placed prominently in the foreground. It is a different interpretation of the Arctic or, *The North*, the original title for the piece. A beautiful and sublime version that expresses Church's spiritual admiration for a God

whose part in this inspiring creation of nature he recognized, even if not yet completely comprehended.

Section 4.*The critical response of the art establishment, the media and the public to the Arctic shows.*

The value of the panoramas, exhibition displays and moving shows of all kinds was their ability, in the opinion of some critics, to expand the affective power of painting which could thus engage the senses almost physically.⁴⁶ Oleksijczuk considers that they were an essential component of a general and compulsive interest in phenomenism or ‘nature as it appears.’⁴⁷ Others considered them to be less than true art, at best, mere popular entertainment and therefore not to be valued seriously. For Richard Altick they constitute ‘a wholesome sign of anxiety for information conveyed through a most effective and impressive medium’ and as a ‘broad stream of culture which ran parallel to and sometimes mingled with, that of the printed word.’⁴⁸

The shortage of a comprehensive visual record means that any fair assessment of these opinions is uncertain if not impossible.

All publicity material was made by producers and is compromised with regard to descriptions of finish and accuracy. Plagiarism was rife with new shows borrowing freely from others to help reduce costs but also because the original but essential authenticity could be transferred simply. This dubious practice was to maximize returns and to retain loyalty from the showman’s audience. In the case of moving or

perestrepthic productions audiences had less time to study the execution of any single feature in the moving work and were thus given an impression that depended much less on detail and realism but still required special artistic skill.

Henry Selous decided that, ‘panorama painting, I feel convinced, causes a very slovenly and loose style.’⁴⁹ Judging by his close attention to detail and re working of the Arctic projects recorded in his journal, he was, presumably, referring exclusively to the work of others. Robert Burford his employer was determined to stress that his shows were painted in the ‘finest oil colour and in the same manner as a Gallery picture.’⁵⁰

The principle objection made by some artists including John Constable, was that the object of the shows was to practice deception. He believed that ‘panoramic painting depicted nature minutely and cunningly but with no greatness nor breadth’ and that the panorama did not represent any kind of art because ‘art pleases by reminding, not deceiving.’⁵¹ John Ruskin, after the closure of the Leicester Square Panorama in the 1850’s wrote that it represented ‘an educational institution of the highest and purest value, and ought to have been supported by the Government as one of the most beneficial School instruments in London.’⁵² Anne Bermingen reminds us that

Thomas Girtin, William Daniell, Edward Dayes Clarkson Stansfield and William Mulready all worked on panoramas.

The auditoria for which Arctic shows were made had a large space separating audiences from display and demanded special perspective that brought an audience closer to the scenery. This undermined the ‘great principles’ which Constable maintained were essential in good paintings of nature.⁵³

Comparing the work on large canvases by American landscape painters like Thomas Cole with panoramas Barbara Novak considers that the same essential qualities were needed. Evenness of tone, brilliance of colour, and absolute accuracy whether they were broadly painted or minutely finished.⁵⁴ Panorama scene painters never visited the Arctic whereas some American landscape painters had seen the subject matter at first hand. Artists were dependent on the naval officers written and available artistic efforts. The officers who produced professional landscape drawings would have been better able to convey Arctic conditions like Frederick Beechey rather than any who were less practiced or limited by their naval training.⁵⁵ The quality of the original material mattered significantly to the eventual realism of the finished scenery.

For public audiences these shows were unique, full of allusion to

Britain's place in the world and helpfully significant in providing much needed access for women into public events and a broader world.⁵⁶ They celebrated British achievements in science and discovery whilst satisfying an increasing enjoyment and interest in countries and places they could never visit, the vast and terrible empty northern landscape made the Arctic shows especially attractive.⁵⁷

Before the panoramas became popular to a large audience, authorised Polar Admiralty accounts had only been available to a small readership. Sir John Barrow considered that these were largely unsuitable for the general public because of their detailed and specialist content.⁵⁸ The panoramas were followed by illustrated newspapers and journals which reprised most of the same *motifs*. Large and singular icebergs, the *aurora borealis*, the immense Polar sky, ice covered ships and the ethnographical descriptions of the Eskimaux.

Russell Potter maintains that 'despite the sea of words with which writers of the day sought to capture the thrill of those forbidding shores,' it was principally through technologies of vision that the Arctic was most 'keenly and energetically' sought. Media such as the panorama, the magic lantern and the illustrated magazine. These extended and fostered public enthusiasm on both sides of the Atlantic

for the north and encouraged landscape painters including the American wilderness painters, Edwin Church and William Bradford a commercial advantage by travelling to paint scenes around Greenland and the coast of Nova Scotia.⁵⁹

In summary this chapter argues that it was the use of colour for Arctic shows that mainly shifted the previous 'deathlike' perception of the Arctic and the ice. Francis Spufford reflects upon the 'terror of white that reminds us of a deathly mask laid over nature so that, when seen for the first time, the varied and unexpected blues, greens and warmer hues of icebergs caused by light refraction, some part of that terror is removed.'⁶⁰ Paintings of ice or snow covered landscapes by John Constable, William Turner of Oxford, and William Mulready contain only pessimistic and featureless aspects in relation to winters in Britain.⁶¹ Ice presented in Arctic panoramas increased by contrived lighting effects reflecting the colours of the northern sky in most beautiful combinations, are referred to in many reviews of the major productions.⁶² The calmness and tranquility in empty white spaces, unusually beautiful colours in formations of ice and the extent and beauty of the heavens, established a softer image for the public.

Robert David believes that artistic interpretation of the sky in

panoramas played to a long held public interest in atmospheric phenomena that originated in the 18th century. The same interest that can be followed through written texts concerning voyages made by James Cook.⁶³ Panorama sky effects were specially contrived to develop mystery and awe summed up lyrically by one magazine reviewer,

‘by splendid contemplation of these stars and brilliant coruscations of the *aurora* to raise his thoughts from Earth to the silent contemplation of the Majesty of Heaven.’⁶⁴

Jean Louis Comolli in *Machines of the Visible* argues that panoramas and other kinds of public spectacle invented a new type of visual culture which represented,

‘a geographical extension of the visible and the representational: by journeys, explorations, colonisations, the world becomes visible at the same time as it becomes appropriable.’⁶⁵

British appropriation of the Arctic showing both heroism and sacrifice was presented to the public as an altruistically motivated endeavour.

This Admiralty inspired approach was deliberately furthered by Barrow using the panoramas broad public appeal, to maintain an enthusiasm for exploration and in a manner that ‘spurred such constant interest that it encouraged, and justified, more exploration.’⁶⁶

Scene painters helped change previous ideas about icebergs and shifted them into embodiments of the Arctic sublime. James Cook's descriptions of 'floating rocks' replaced by images that provoked an interest, wonder and amazement at their impressive sizes, shapes and movements.⁶⁷ Their obvious danger to ships was not diminished but instead of an iceberg seen as *daimon* they become constant and better understood properties in the Arctic landscape offering special rewards to audiences as objects of a 'curious but admiring gaze.'⁶⁸

Late in the development of the shows and panoramas, although provided for by lectures about and exhibitions on the Arctic, the Eskimaux their *iglu* and the *kayak* become another special piece of iconography even though aspects of their society, such as the important part played by women, was completely ignored.⁶⁹

The monochrome engravings used by the illustrated magazine from the 1840's displaced the sublime and softer perception of the north and the disquiet of the public over the long unfulfilled searches for Franklin and his men, reduced also any positive identity.⁷⁰ Invention of colour film being one crucial technical advance that would shape the imagery of the Polar regions differently in the future.

-
- ¹ Denise B Oleksijczuk. *The First Panoramas. Visions of British Imperialism*. University of Minnesota Press. Minneapolis. 2011. p 2.
- ² Chauncey C. Loomis. *The Arctic Sublime*. in *Nature and the Victorian Imagination*. Ed. U.C. Knoepflamacher and G.B. Tennyson. Berkeley. University of California Press. 1977 p95.
- ³ Marjorie Hope Nicholson. *Mountain Gloom and Mountain Glory: The Development of the Aesthetics of the Infinite*. Ithaca. New York. 1959. pp 15 - 16..
- ⁴ James Thomson. *The Seasons and the Castle of Indolence*. Ed. J. Sambrook. Clarendon Press. Oxford. 1972.
- ⁵ A.D. McKillop. *The Background to Thomson's Seasons*. University of Minnesota Press. Minneapolis. 1942. Preface.iv.
- ⁶ A.D. McKillop. *The Background to Thomsons Seasons*. University of Minnesota Press. Minneapolis. 1942. Preface p iv.
- ⁷ Barbara Maria Stafford. *Voyage into Substance. Art, Science, Nature and the Illustrated Travel Account, 1760 - 1840*. MIT Press. Cambridge.MA. 1984. Most scientific discovery being considered one aspect of taste. This, as a background, accounting for the expression, 'taste for discovery'. p18
- ⁸ Barbara Maria Stafford. *Voyage into Substance. Art, Nature and the Illustrated Travel Account, 1760 -1840*. MIT Press. Cambridge.MA.1984. p198.
- ⁹ Sir John Barrow. F.R.S. *Bart A Chronological History of the Voyages in to the Arctic Regions*. John Murray. London 1818. Barrow quotes Thomson's verse from *Winter*. 'Miserable they! Who here entangled in the gathering ice, Take their last look of the descending sun; While full of Death and fierce with tenfold Frost, The long long night incumbent o'er their heads Falls horrible'. p125
- ¹⁰ Chauncey C. Loomis. *Arctic Spectacles. Nature and the Victorian Imagination* University of California Press. Berkeley. 1977. p102
- ¹¹ Russell.A. Potter. *Arctic Spectacles. The Frozen North in Visual Culture 1818 - 1875*. University of Washington Press. Seattle. 2007.p6.
- ¹² Denise B.Oleksijczuk. *The First Panoramas. Visions of British Imperialism*. University of Minnesota Press. Minneapolis. 2011. p171.
- ¹³ Russell. A. Potter. *Arctic Spectacles. The Frozen North in Visual Culture. 1818 - 1875*. Washington University Press. Seattle. 2007. p12.
- ¹⁴ R. Hyde, *Panoromania! The Art and Entertainment of the 'All embracing View'*. Trefoil Publications. Barbican Art Gallery Exhibition. London. 1988. Hyde

mentions a production designed by J.P. de Louthembourg on the theme of Cooks Second Voyage, shown in the Eidophusikon in Lisle Street in 1781. This has no record with which to judge its content or merit.

¹⁵ Russell A Potter. *Arctic Spectacles. The Frozen North in Visual Culture. 1818 - 1875*. University of Washington Press. Seattle. 2007.p 43. The final encounter between the Swiss born Victor Frankenstein, the monster and Walton taking place in the Arctic regions just as Walton decides to return from his attempt to reach the Pole. As Franklin and Buchan also attempted to do.

¹⁶ Henry Aston Barker *Description of the North Coast of Spitz Bergen*. Adlard. London.1819.p5.

¹⁷ Ibid Hyde uses for his title description 'all embracing view' based upon part of a Barker panorama programme of the 1820's. He expresses these in general as 'unlimiting the bounds of painting.'p13

¹⁸ Denise.B.Oleksijczuk. *Visions of British Imperialism*. University of Minnesota. Minneapolis. 2011. p 6. Naval scenes between 1793 and 1802, were half of all the subjects presented in panoramas, including Admiral Lord Nelson's victories.

¹⁹ Sir John Barrow. F.R.S.Bart. *Quarterly Review*. 21/24. January 1819. p 213 - 262.

²⁰ The moving Diorama with sound and noise effects was the invention of Carl Wilhelm Gropius in Berlin in 1827. *Illustrated London News*. 17th August 1850. 'This development created an extraordinary increase in the number and variety of pictorial exhibitions, illustrative of scenery in different parts of the world.'

²¹ The Scotsman March 14th 1821.

²² Captain Frederick William Beechey. R.N. *A Voyage of Discovery towards the North Pole performed in His Majesties Ships Dorothea and Trent under the command of Captain David Buchan*. John Murray. London. 1843. .

²³ Richard Altick.*The Shows of London. A Panoramic History of Exhibitions. 1600 - 1862*. Harvard University Press. Cambridge. MA. 1978. Intro. p3.

²⁴ Ralph Hyde.*Panoromania The art and entertainment of the 'all embracing view'*. Trefoil. London. 1988. p 132.

²⁵ *Description of a View of the Continent of Boothia discovered by Captain Ross. Exhibiting at the Panorama. Leicester Square. Painted by the Proprietor Robert Burford from drawings painted by Captain Ross*. Promotional Handbill. J&G Nichols. London 1834. p5

²⁶ *Description of a View of the Continent of Boothia discovered by Captain Ross. Exhibiting at the Panorama. Leicester Square. Painted by the Proprietor Robert Burford from drawings painted by Captain Ross.* Promotional Handbill. J&G Nichols. London 1834. p5

²⁷ Russell A. Potter. *Arctic Spectacles. The Frozen North in Visual Culture.* Washington University Press. Seattle. 2007. p 67. Potter remarks that the circularity of the key indicates a 360 degree sweep of the compass including the direction of the place from which the compass movements emanated, but in which no sight, no bearing and no means of escape, were shown.

²⁸ Robert David. *The Arctic in the British Imagination.* Manchester University Press. Manchester. 2000. P151.

²⁹ Russell A Potter. *The North in Film.* Paper Presented at Visions of the North. North Bay Ontario. May 1998. p16.

³⁰ *The Times*. 14th January 1834. P5. This article is entitled 'Panorama of Boothia.' The Robert Burford booklet was entitled *Description of a View of Boothia discovered by Captain Ross on his late expedition to the Polar Regions.* Nichols. London. 1834..NMM. 629.123

³¹ *The Morning Post*. 15th January. 1834. p1. British Library Newspaper Archive.

³² *The Morning Post*. 31st March. 1834. p3. British Library Newspaper Archive.

³³ Carol Cronquist and David A Rausch. *Notes and Queries* 41/3. September 1994. 'Attribution of a Panorama Painters Diary. P348. The diary is held in the Victoria and Albert Museum. London . This refers to the use of sequins to replicate the appearance of stars.

³⁴ Russell A Potter. *Arctic Spectacles. The Frozen North in Visual Culture.* Washington University Press. Seattle. 2007. 'The *Times* in general, took brief or little notice of panorama shows but nearly filled a column with this review which included a lengthy quote from John Ross's description of the scene. p.69

³⁵ Henry Courtney Selous. *Journal*. 6th January 1834. National Art Library. Victoria and Albert Museum. London. MSC/1972/5117. 'Got on with the stars a little better today. having got rid of my nervousness in a great degree from the scaffold collapse yesterday. Had a visit from two of Captain Ross's men who communicated much information'.

³⁶ Russell A Potter. *Arctic Spectacles. The Frozen North in Visual Culture. 1818 - 1875.* Washington University Press. Seattle. 2007. p 70. The *Times*. 14th January 1834.

³⁷ *The Times*. 14th January. 1834. p 5. British library Newspaper Archive.

-
- ³⁸ Russell A Potter. *Arctic Spectacles. The Frozen North in Visual Culture. 1818 - 1875*. Washington University press. Seattle.2007 p 93.
- ³⁹ Michael J. Ross. *Polar Pioneers: John Ross and James Clark Ross*. McGill-Queens University Press. Montreal.1994. p166. Illustrated Handbill.
- ⁴⁰ *Morning Chronicle*. 25th June 1834. p3. British Library Newspaper Archive.
- ⁴¹ *London Evening Standard*. 28th May 1834.p6. British Library Newspaper Archive.
- ⁴² Russell A Potter. *Arctic Spectacles. The Frozen North in Visual Culture. 1818 -1875*. Washington University Press. Seattle. 2007 Appendix Arctic Shows and Entertainments. 1819 -1896.
- ⁴³ *Hamiltons Grand Moving Panorama of the Arctic Regions*. Painted by A. Adams. Opened in October1849.Minerva Hall Haymarket.London. Toured Bath and Exeter.1850.
- ⁴⁴ *The Athenaeum*. January 12th 1850, p50. Reported within article *Views of the Arctic Regions* ‘ I was the only officer or person in the *Enterprise* who took any drawings of those regions during the late Expedition under Captain James Ross and which the Admiralty have allowed Mr Burford to use. I am, W.H.J. Browne R.N.’
- ⁴⁵ Robert David. *The Arctic in the British Imagination*. Manchester University Press. Manchester. 2000.p154.
- ⁴⁶ Russell A.Potter. *Arctic Spectacles. The Frozen North in Visual culture. 1818 - 1875*.Washington University Press. Seattle. 2007. p135
- ⁴⁷ Charlotte Klonk. *British Landscape Art in the late Eighteenth and early nineteenth Centuries*. Yale University Press. New Haven. Connecticut. MA.1996. p 5.
- ⁴⁸ Richard Altick. *Shows of London. A Panoramic History of Exhibitions*.1600 - 1862. Harvard University Press. Cambridge. M.A. London. 1978. p 2.
- ⁴⁹ Henry Courtney Selous. *Journal*. 3rd November 1833. National Art Library. Victoria and Albert Museum. London. MSL/1972/5117.
- ⁵⁰ *Illustrated London News*. No 414. February 23rd 1850.p133.
- ⁵¹ Angela Miller. *The Panorama, the Cinema, and the Emergence of the Spectacular*. Wide Angle. 18/2. 1996. p44.

⁵² *Praeterita in the Works of John Ruskin*. (Ed. E.T. Cook, A Wedderburn). George Allen.London 1908. Vol. 24 p117.

⁵³ Richard Altick. *The Shows of London A Panoramic History of Exhibitions 1600 - 1862*. Harvard University Press. Cambridge. MA 1978. p.137.

⁵⁴ B.Novak. *Nature and Colour; American Landscape and Painting*. OUP. New York. 1980 pp 18 -33.

⁵⁵ Felix Booth of Booths Distillery gave money to this expedition and the use of the specially designed Boothia Flag, the naming of a headland, but not a Continent, are prominent in drawings and in the Burford panorama which gives rise to suspicion that Ross determined how best to promote the interests of his main sponsor.

⁵⁶ In both Robert Burfords's 1834 and 1850 shows the floor was painted black so that audiences felt very detached from reality and in a void similar to that of the expeditionary crew..

⁵⁷ Chauncey Loomis. *The Arctic Sublime. Nature and The Victorian Imagination*. University of California Press. Berkeley. 1977.pp102/103. Loomis suggests that Edmund Burke would have used the Arctic in his analysis of the sensational causes of the Sublime. Light and dark, sound and silence, obscurity, solitude, vastness and magnificence.

⁵⁸ Sir John Barrow Bart. F.R.S. *Voyages of Discovery and Research within the Arctic Regions from the Year 1818 to the present time*. John Murray. London. 1846. Preface. P vi. 'The Charts and prints by which they are illustrated are made highly valuable to the man of Science and Taste, well adapted for Public libraries or those found in the mansions of the wealthy, but they are not exactly suited for general circulation.'

⁵⁹ Russell A. Potter. *Arctic Spectacles. The Frozen North in Visual Culture.,1818 - 1875*. University of Washington Press. Seattle. 2007. p4.

⁶⁰ Francis Spufford. *I May Be Some Time*. Faber and Faber. London .Boston. 1996. P 91.

⁶¹ John Constable. *Winter Landscape*.c 1830.Oil on Canvas. After Jacob Van Ruisdael,m Oil on Canvas. 55.2 x 66.6 cm. Philadelphia Museum of Art. Cat 688. William Mulready. *A Snow Scene*. c 1806. Tate Britain .London. After Isaac van Ostade. *Travellers Outside an Inn*. 1647. Oil on Panel. 83.2 x 109.5cm. RCIN. 405216.

⁶² *Illustrated London News*. 16th February/ February 23rd. 1850. ' Splendid arches of crimson light, the Aurora Borealis and the pale moon, shed a wild and weird glory on iceberg and vessel.'

⁶³ Robert David. *The Arctic in the British Imagination*. Manchester University Press. Manchester. 2000. p151.

⁶⁴ Bell's Weekly Magazine. 13/1/1834. p34.

⁶⁵ Jean- Louis Comolli. *Machines of the Visible* in, *The Cinematic Apparatus*. (eds. Teresa de Laurentis & Stephen Heath). Macmillan. London. 1980 p 122 - 123.

⁶⁶ Steven Oettermann. *The Panorama:History of a Mass Medium*. Zone Books. New York. 1997.p45

⁶⁷ See Fig 3.9. *Royal Panorama Leicester Square. View of the Polar Regions*. Numbers 2 and 8.

⁶⁸ Gerald L. Carr. *Frederic Edwin Church: The Icebergs*. Dallas Museum of Fine Arts.1980. p 39.

⁶⁹ Robert David. *The Arctic in the British Imagination*. Manchester University Press. Manchester.2000. p 143.

⁷⁰ Robert David. *The Arctic in the British Imagination*. Manchester University Press. Manchester 2000. P 154.

Chapter Three.

The killing glitter of the stars.

The expedition led by Sir John Franklin was the final voyage into the Canadian Arctic inspired by Sir John Barrow. His unshakeable belief being that, ‘the discovery, or rather the completion of a passage .. ought not to be abandoned after so much has been done, and so little remains to be done.’¹ He was convinced the passage could be found despite the evidence provided by James Clark Ross, Edward Parry and George Back over the previous 25 years that the ice was unpredictable and impregnable throughout most of the year. Barrow used the main scientific justifications for the expedition stressing its importance and adding that a Russian expedition could discover the passage first; a serious threat to British international prestige. Although scientists such as Edward Sabine and experienced naval officers including Parry, James Clark Ross, and Franklin expressed approval of the scheme, others, including William Scoresby and John Ross were in open dissent. The ships were equipped with fresh and tinned food as well as clothing supplies for three years and coal for the newly fitted engines for over 1000 miles of use. It was ‘the most lavishly equipped Arctic expedition to date.’²

Theories over the reasons for the loss of both of the ships and their

complement of 149 men have included the suspicion that local Eskimaux massacred the starving men, a calumny which Inuit speaker Dr. John Rae (1813 -1893) eventually disproved, suffocation from carbon monoxide poisoning, and that scurvy and pneumonia had weakened and struck down the crews and their officers one by one. A Canadian toxicological report in 1988 showed evidence of lead traces in some of the recovered bones indicating that some canned foods had been badly sealed causing food poisoning and botulism.* The most compelling and simple reason is starvation and hypothermia through an inability to use native techniques for survival after abandonment of both ships near King William Island some time in 1847 so as to find a Hudson's Bay Company settlement 700 miles up the Great Fish River. Interest was aroused in 2013 by submarine surveys conducted by a salvage company diving south of the position originally estimated for the sunken ships but nothing has yet been uncovered leading to another unsolved question concerning the tragedy.†

This chapter is concerned with the five year period between 1849 and 1854 during which there were many expeditions by ship and by the

* Owen Beattie. University of Alberta, Anthropological Department published in 1988 in *International Journal of Analytical Chemistry* a paper entitled *Lead levels in Human Tissues from the Franklin Research Project*. Gordon and Breach Publishers No 35. (2) p 119 -126.

† One theory to explain this mystery, presented by Noel S. Wright in *New Light on Franklin*. W.S. Cowell. Ipswich. 1949 claims that the ships floated away fast within a huge drifting iceberg which melted and that they sank out in the Atlantic.

land in northern Canada looking for the Franklin Expedition that left Britain on May 19th 1845. The largest of these were two Admiralty commissioned expeditions during 1851 to 1854 which returned with visual and hydrographical material that completed most remaining sections of the Canadian Arctic archipelago and a North West passage. A list of all the search expeditions for the period up to 1859 is given in **Appendix 1**. Most expeditions returned to publish a journal of their voyage and these accounts became popular travel accounts. They were often serialized in the best known family periodicals of the day, vying for the readers' attention with works by novelists such as Dickens, Elizabeth Gaskell, Wilkie Collins and Anthony Trollope.³

The objectivity of the visual record for the Admiralty searches was broadly consistent with previous Arctic material although the selection of the subject matter and emphases to key events is different. One is the account of a voyage with the newsworthy discovery of a North West passage, whilst the other maintains the dutiful record of precise and difficult scientific reportage with many surveys emanating from frequent and widespread searches for Franklin over land. The latter also included for the first time examination under a microscope of the range and disparity between types of snow and ice crystals that occurred during the voyage.

Newspapers and magazine editorials fully supported the humanitarian principles involved in the search for the lost ships whilst reflecting a growing public concern over whether the Admiralty efforts to find Franklin were now worth the investment in both time and cost.

There are three sections in this chapter, two of which examine the voyage records and observations of the ice from the last searching expeditions and a third section viewing that material printed by the popular British press. An oil painting by Sir Edwin Landseer,(1802 - 1873) *Man Proposes. God Disposes* (1864) represented a sardonic even satirical reflection on the persistent determination of various British governments to find a North West passage with all the scientific scrutiny and examination of the Arctic region integral to that quest. An epitaph not only for the men of the lost expedition but for further Arctic exploration by the Royal Navy.

Section 1. *The Voyage of H.M.S. Investigator and the completion of a North West passage.*

The Franklin expedition had been sent to chart the last remaining stretch of the North West passage between the Barrow Strait and the Coronation Gulf through the Prince Regent Inlet, or, if ice prevented that, to continue north up the Wellington Channel and through any navigable areas of the Beaufort Sea to Bering Straits and into the Pacific. See **Fig 3.1 Green shaded area**. It was Sir John Barrow's last opportunity to claim the complete North West passage before retirement⁴. Barrow repeated his conviction that the voyage would, 'render the most important service that now remains to be completed of the magnetic survey of the globe', and for 'the value of the scientific observations and discoveries made in the Arctic voyages independent of all national and selfish considerations that was duly appreciated on the Continent.'⁵ Although it was felt that this expedition was bound to succeed no officer was chosen to make a visual account nor were any cameras taken.

The Belgian marine artist, Francois Etienne Musin (1820 – 1888), painted *H.M.S. Erebus's Arctic venture under the command of Sir John Franklin*. (**Fig 3.2**) ⁶ after the expedition left Britain. The painting shows *H.M.S. Erebus* approaching an ice field and is a ship portrait

dramatised by sunlight illuminating the vessel as it approaches the ice. Dark clouds suggest an approaching risk from the weather but the icebergs have a radiance and a solemn beauty. Musin commemorating the ship and her brave crew had no knowledge of the eventual loss. It could have been painted for Barrow, the Lords of the Admiralty or a member of Sir John Franklin's family

An searching expedition three years following Franklin's departure, was the subject of the static panorama painted by Robert Barker and Henry Selous, in 1850. In this search the North Somerset and Leopold Harbour regions were examined and was where the expedition remained for 10 months. See Chapter 2.

In 1850, a report from a Committee appointed by the Lords Commissioners of the Admiralty, proposed an urgently arranged expedition of five ships to search the main routes proposed in Franklin's orders.⁷ Another naval force was sent to the Pacific to the Bering Straits following the route of James Cook in 1776 - 1780. This expedition consisted of two ships, H.M.S. *Enterprise* and H.M.S. *Investigator*.**(Fig 3.3)See Red Line.**

The *Enterprise* was delayed by weather and sickness but the *Investigator* commanded by Robert M. Le McClure, entered the Bering Straits and turned east. They reached the Canadian coast in the

autumn of 1850. *First Sight of Land, 1850* (**Fig 3.4**).at Cape Barrow seeing strange smoking cliffs which were examined by Dr. John Armstrong one of their accompanying scientists. He collected, ‘considerable quantities of earths and minerals’.⁸ The voyage account states his opinion that the fires were caused by a ‘substratum of coal that had caught fire by spontaneous combustion.’ The fires were mainly in landslips surrounded by ‘pools of copperas blue.’ The scientifically significant geological and mineralogical discoveries were documented in appendices to the account, but were referenced to the folio edition chromolithographs presented to Queen Victoria and Prince Albert.

Sir Roderick Murchison F.R.S. drew specific attention to these finds. A leading geologist he wrote to the Royal Geological Society about Arctic geology which included a summary of his conclusions based on these and earlier discoveries.⁹

‘ the substratum of rocks and considerable quantities of preserved and fossilised wood that were found even on the high grounds of large islands in latitudes where the dwarf willow is now the only living shrub, proved decisively that a glacial *sea*, not ice, had covered large portions of such lands and that the only distinction between such deposits in Britain and those that were formed in the Arctic circle is

that the wood which was transported to the latter has been preserved in its *ligneous* state for thousands of years through the excessive cold of the region.’¹⁰

Murchison’s essay included the phrase ‘all geologists are agreed,’ in relation to the existence of a recent glacial period in history overriding a long running scientific dispute over evidence of the global ice age.¹¹

The methodology used for new science such as geology was praised by one art critic prior to the *Investigator* voyage who proposed that, ‘almost exact within the present century, Geology and Chemistry are almost re-instituted. The first has been nearly created, the second expanded so widely that it now searches and measures the Creation. It has done this by being precise in the search after truth! If this addresses to fact, to experiment, and not theory and has added so much to the knowledge of man in science, why may it not greatly assist the moral purpose of the arts?’¹²

The territory of Cape Bathurst and the mouth of the Coppermine River previously explored by George Back in 1822, was described as an ‘oasis’ for the crew and is referred to as ‘the Otaheite of the early navigators.’ The description by McClure extolls the appearance and character of the local Eskimaux, proposing that this area should be converted to Christianity.’¹³ The description of the location and

appearance of the settlement has certain similarities with those of the Pacific islands taken from Cook's narratives. McClure notes that his crew wanted to remain because of the native women and gives in evidence of their unusual sophistication that copper was often used instead of whale bone.

The geology of *Bold Headland on Barings Island, 1850*, (**Fig 3.5**) See **Fig 3.3. Red Dot 1.** shows a cliff estimated at 1000 feet with a shape described by McClure as resembling Lord Nelson's head. The detail in this study indicates weathered rock in 'laid down' combinations including granitic columns shown at the top right hand of the picture. This was of significance to Arctic geologists.*

The ice pack surrounded the *Investigator* and, 'several heavy floes in the vicinity - one six miles in length - passed at the rate of two knots crushing everything in their path.' This dangerous situation is demonstrated by *H.M.S. Investigator in the Pack. October, 1850*.

(**Fig 3.6**) See **Fig 3.3 Red Dot 2.**

The increase in ice floes from the Beaufort Sea driven by constant wind prevented more progress that year. The *Investigator* was frozen in by 30th September near the newly found Princess Royal Island, at the far end of the Prince of Wales Strait.

* The layers could be compared to rock types from various parts of Europe including Scotland and dated to known periods of pre history.

The following spring they attempted to circumnavigate the western side of Baring Island but the ship met with more severe weather and was frozen in again. *The Critical Position of H.M.S. Investigator on the North Coast of Baring Islands, 29th August 1851*, (Fig 3.7) See **Fig 3.3 Red Dot 3**. The *Investigator* is above the ice floes and a helplessness in their position is clear with the ship about to be crushed at any moment. ‘Our fate seemed sealed,’ and ‘if crushed the destruction of every soul was inevitable’ were recorded about this situation but a favourable wind provided ‘a merciful and providential escape.’ The conditions which they escaped, the narrative concludes, were due to, ‘the ice met with (by Captain McClure) was aged sea ice which might be centuries old. The accumulated action of repeated thaws and the almost constant fall of snow upon the upper surface have given the peculiar hill and dale appearance to it and renders it fresh to taste as if it had been formed on shore, instead of upon the sea.’¹⁴ After escaping the ship is again ‘providentially’ rescued by the discovery of an inlet they name Mercy Bay although the ship was iced in over two years before having to be abandoned in June 1853. In Mercy Bay crews were sent out in sledging parties for hunting and to explore the limits of Baring Land. In *Sledge party leaving H.M.S. Investigator in Mercy Bay under the Command of Lieutenant Samuel*

Gurney Cresswell. April 1853. (Fig 3.8) groups are leaving the ship.

The red cliffs of Baring Land are contrasted against the sea ice in the foreground, already showing signs of the spring melt. One sledge party reached Winter Harbour on Melville Island 170 miles to the east, where Edward Parry had wintered in 1819. Completion of a North West passage route had been achieved. *Melville Island from Bank's Land. May 1852. (Fig 3.9)*, shows this stretch of permanently frozen sea, See **Fig 3.3 Green Line**. This catches the pink and orange daylight of returning summer reflected off the pack ice and a distance between Melville Island and their viewpoint reasonably close.

Cresswell was unsure whether the land in the distance could be a different horizon because this land, the cloud, ice mists, and ice were not easily distinguished.¹⁵

Travel over this confused ice is shown with *Sledging Over Hummocky Ice April, 1853 (Fig 3.10)*. A sledge party is moving up a steep gradient of ice with an officer searching for a route ahead.

Blocks of ice resembling rocks in melted ice lie around the foot of the cliff to the left. The continuous physical and mental effort for the crew is amplified by the monotone grey sky and an absence of respite in the way of a ship or a refuge. This is a personal contest between men and ice for which fragile sledges and man hauling was no answer.

Eventually the sledges met others sent from ships from the eastern expeditionary squadron to find them.

The discovery of a North West passage was celebrated in Parliament and by the British public. The published account by two officers, Sherrard Osborn and Samuel Gurney Cresswell, the voyage artist, appeared in 1856 and a folio size set of eight chromolithographs with short descriptions and a special coloured chart of the route, was published by Ackermans in July 1854, one year after the expedition returned to Britain.

This folio edition dedicated to Queen Victoria and Prince Albert, was produced by the fine art lithographers, Day and Son. The edition used a new type of optical colour mixing and stippling to accurately match the original sketches.¹⁶ Baring Island and Prince Rupert Land had been added to the Arctic map but ice conditions and the loss of another modern ship persuaded the Admiralty that safe navigation from the Pacific to the Atlantic, by this route at least, was impracticable. The British public meanwhile had become more concerned with the Russian War 1854 - 1857 and less preoccupied with Franklin and Arctic exploration.¹⁷

Section 2. *The Voyage of H.M.S. Assistance and the Arctic Squadron.*
1852 - 1854.

The orders for this searching expedition were for three vessels to explore through Wellington Channel to its limits, map the Arctic Sea if it existed, and discover whether Franklin had followed this route. Two others were to sail westwards through Lancaster Sound and the Barrow Strait and explore the southernmost and western side of the Melville Sound, including Melville Island. (**Fig 3.3 Blue Line**). The account includes summaries of work by scientists including Sir John Richardson, F.R.S a respected member of the Canadian overland expeditions of 1825 and 1826, Professor Owen Lovell Reeve F.R.S. F.G.S. who recorded the shell and sea life species found, and a carboniferous fossil specialist, J.W. Salter.

The appendices include a study of the ‘higher order’ of some snow crystal formations, such as *Double Crystal. Primitive Stellar figure*. (**Fig 3.11**) Belcher admits that ‘we are greatly in doubt respecting their origin,’ The drawings may have been the work of Belcher who states that there had, ‘by some unthinking persons’ been ‘a tendency to sneer at or undervalue the labours of Scoresby, Glaisher and others for frittering away their time in the pursuit of the same objects under consideration.’ The categorisation of these vital clues to the nature and

strength of separate types of ice is alone amongst any published voyage accounts after the work of William Scoresby in 1809.¹⁸ They were catalogued in an appendix together with analyses from cubes of frozen salt water and floe ice, for weight and salt content.¹⁹

Sir Edward Belcher, took new trial instruments on this voyage. Compasses, azimuths, microscopes and deep water thermometers. Ice boats with iron runners to be used as sledges were taken to search areas inland. The extent of Beechey, Bathurst and Devon Islands, and the coast south into the Prince of Wales Sound specifically. Belcher reported that an additional forty thousand square miles had been surveyed. He proposed that ‘this has been deemed a scientific expedition in connection with the great search.’²⁰ This ordering of his priorities suggests a desire for scientific study in preference to extensive searches for survivors or evidence of what was now recognized except by Lady Franklin, as a doomed expedition.

In all 18 colour and black and white lithographic plates make up a two volume record of this voyage, and 16 drawings in the appendices of specific scientific subject matter.. The voyage artists involved were Walter W. May R.N.(1831 – 1896), with 13 illustrations, and 5 by George F. McDougall R.N. (fl. 1854 -1855). There are also 25 small wood engravings in the main text. These small engravings show in

detail specimens of wildlife or rock or fossil samples as well as types of equipment used, whilst the lithographs illustrate the ships of the Arctic squadron, anchorages, and important landmarks and coastal features.

A colour lithograph by Frank Herbert, *Departure of the South West Division 1854* (**Fig 3.12**) shows sledging groups leaving the base ship in naval formation. They have distinctive flags, sails set, and sailors pulling in harness. The sledges rig and construction are described and sketched in one engraving set in the text.²¹ Facing the illustration showing the departure of these sledges, or ice boats, is an engraving of the, ‘hard edged clouds’ which Belcher scientifically analyses as a ‘very beautiful illustration of the effect of intense cold arresting the upper currents of air.’²² The clouds also surrounded an arch on the horizon having a delicate salmon tint ‘affording the pleasing idea of a March sunrise in England.’ The effects in the sky are described in detail for any connection to compass variations and the weather.

The sketch by Walter May used for a coloured lithograph, described by Belcher as ‘the very interesting sketch of the subject under notice, to which I am indebted to the pencil of Lieutenant May, as well as of the ship and tender at our winter quarters.’ Shows a *Paraselena*, *Noember 30th Northumberland Sound* (**Fig 3.13**). This apparition is

‘beautifully defined’ having ‘two concentric halos, incomplete near the horizon, accompanied by two strong crucial rays, vertical and horizontal, having the moon for their centre, the moon at this moment being four days past the full.’ As well as its inner circle other attributes of the arcs and eccentric circles with a common centre appear within the zenith. Outer halos at various contact points create luminous ‘spots.’ The drawing of this meteorology is persuasive and increased by the obvious contrast between the soft appearance of the *parasalenae* and the stiff snow shrouded outlines of ship hulls and rigging.*

The strength of the moonlight is shown by the deep shadows formed around two men in the foreground and the posts marking a route to the observatory. The artist is on the ice and brings the audience into this setting beside the crewmen. The sky is tinted by the *aurora* and a scattering of stars are just visible. The blue and grey hues for the ice and the mauve of the sky give a similar sense of serenity and silence as that created by Frederick Beechey engraved by William Westall.

(Fig 1.24)

The sledges travelled in fast changing ice conditions and were

* Paraselena are caused by moonlight passing through ice crystals in the upper atmosphere. It creates luminous spots on the lunar halo. Equivalent to the *parheliae* which are created by the sun. Wm Scoresby Jn. *An Account of the Arctic Regions 1809* Vol. 2 p389 .

adapted for different purposes. *Encamping for the Night, 1854* (**Fig 3.14**) shows one team unloading, making food, and setting up camp. Both *Sledge Party returning through water during the month of July 1854*, (**Fig 3.15**) and (**Fig 3.16**) *Sledges in a Fair Wind going over hummocky ice, 1854*. provide testament to Belcher's description of their searches as 'heroically contesting possession of the land' and the sledges or iceboats as 'an essential means of finding even the smallest evidence of the route of Franklin.' The lithograph *Division of Sledges finding and cutting a road through heavy hummocks in the Queens Channel*. (**Fig 3.17**) shows the super human efforts these sailors could maintain in searching for Franklin.²³ The artist makes the reader very conscious of a primitive slavery to this work intending quite possibly to show how tools such as pickaxes, ropes and sledges were useless against the conditions. May's official version shows how expeditionary orders were diligently carried out, but he implies by the scale of the ice and the bent figures the doubtful result of their efforts.

During their second winter of 1853-1854, trapped in an exposed location near to Brown Island, the ships were threatened by large ice floes.²⁴ The discovery of severe leaks in several ships meant the transfer of stores onto the land. Walter May provides an illustration of their exposed position at this point with *H.M.S. Assistance and*

Pioneer in Winter Quarters, returning daylight (**Fig 3.18**). This lithograph includes these ships seen from the level of the sea ice. He uses the deep shadows created by the moon to the right and the softer light from the rising sun on the left each in opposition to the other. Two figures close to the artist are preparing a hole for a thermometer, or measuring the position of a star. In the centre ground a well like structure supports some scientific equipment. The air temperature has produced a mist over the ice and broken mounds rise through this creating an effect like headstones. In Frederick Beechey's drawing of *H.M. Ships Hecla and Griper in Winter Harbour* (**Fig 1.33**) See **Fig 3.3 Blue Dot 1** the Constellation of the Bear, *Arctikos*, with the moon low in the winter sky was used to explain the feeling of deep winter conditions but here the portents indicate the ending of total darkness and that welcome release from the ice which was approaching.

The account by Belcher of the same winter includes a description of his 'vision'.²⁵ A prismatic cross with a pedestal rising from the ice pack. (**Fig 3.19**). It occurred two days before the full moon and was a most 'beautiful phenomenon.' This 'emblem,' as Belcher describes it, shows that 'whatever his creed may be, no one can gaze without feelings varying according to his education, moral as well as religious.' The appendices describing the meteorology on this voyage,

twenty seven pages in total, provide no explanation for this very curious and spiritual phenomenon. The 'vision' and its appearance took place on the day of burial of one of the seamen from *Assistance* near the astronomical observatory. Neither May nor McDougal saw fit to make a sketch despite the powerful response it invoked from Belcher. It appears to have convinced him that Divine Providence was somehow represented by this emblem and even despite scientific training he also, along with comments by John Ross, George Back, Frederick Beechey and Edward Parry had become convinced that the Arctic was imbued with the strong presence of the Deity.

Edward Belchers' report to the Admiralty on his return with no news about Franklin, was forthright. Despite obtaining extensive amounts of data he considered none of it, 'decided which argument could be founded, as to mean temperatures of months or seasons nor the ratio in which the freezing of the winter ice covering those seas proceeds. Nor do I pretend to have determined these questions.'²⁶ The group of scientists did not explain reasons for tidal streams, combined with the ranges of sea and air temperatures, that led to parts of the Arctic archipelago to remain open at times and closed again when 'nature appears to promise its free navigation.'²⁷

Franklin had actually sailed into Peel Sound which had been clear of

ice in summer 1847, but normally was un-navigable year round. His ships were subsequently trapped and their crews all died. (**Fig 3.3**) see **Blue Dot 2**. The route had been ignored in the Admiralty search plans because of its history.

The journals and log of McClure, written and published by Sherard Osborn illustrated by Samuel Gurney Cresswell is a complete voyage which references topics from the later exploration accounts of Cook. Both factual and objective in describing the voyage of discovery in terms both scientific and territorially. They had discovered one passage from the Pacific to the Atlantic, met natives who exhibited signs of the ‘civilising’ criteria that explorers wished for, and heroically surmounted terrible conditions. The account by Belcher and the illustrations by Walter May, are slanted towards new scientific work and surveying which Belcher regarded as a personal triumph as well of future significance to Britain. It was also an attempt by him to avoid Admiralty criticism of some poor decisions.²⁸

The studies of Samuel Gurney Cresswell together with a written record by John Armstrong, provided substantial evidence of pre ice-age conditions inside the Arctic circle and along the edge of the North American Continent. The illustrations of the geology patterns and diagrams of fish fossils and preserved flora, especially trees,

contributed to a reassessment of the very early history of this part of the planet and that ice had not always covered the sea. The rocks and fossils under the Arctic ice had a scientific value greater than the comprehensive measurements taken for surface sea ice which could not, as Belcher himself admitted, be evaluated to any navigational advantage.

The coastal views and mapping work from the many sledge search parties added information on the geography and profiles of the land masses to the north of Barrow's Strait and the Queens Channel which meant that the map of the north eastern side was now nearly complete. This fact eliminated any arguments in favour of new geographic or scientific surveys but the discovery of the missing Franklin expedition remained.

Section 3. *The Illustrated London News. The account of the Franklin searches and for the North West passage.*

Newspaper production methods by the mid 1840's are supposed to have re-created relationships between proprietors, illustrators, engravers, and readers as they created 'confusion and contention between the urge to retain Art's status with celebrations of the mechanics of artistic reproduction.'²⁹ Richard Altick observes that the *Illustrated London News* (*ILN*) usually subordinated text to pictures and that a generous supply of pictures became indispensable.³⁰

In the first issue the *ILN* announced that, 'the public will have henceforth under their glance, and within their grasp, the very form and presence of events as they transpire, in all their substantial reality and with evidence visual as well as circumstantial.'³¹ The pencil, this editorial went further to suggest, would be 'oracular with the truth' whenever the pen was led into fallacious argument. These intentions became problematic as searches for Franklins' expedition returned with little or no verifiable new evidence over their whereabouts.

The two expedition ships leaving the Thames were shown by the *Illustrated London News* in May 1845 (**Fig 3.20**).³² They are under sail despite the Admiralty having fitted railway engines into both ships. This application of steam power was confidently expected to

help the ships move through lighter and weaker summer ice and to travel a greater distance in those critical months.

The news of Franklin's disappearance in the *ILN* began from October 1849 with a feature, *Pictures of the Polar Regions*. This article and four illustrations were the result of 'immediate interest' in the Arctic regions started by a report that *Erebus* and *Terror* had been seen by whaling ships in the Prince Regent's Sound. The *ILN* story was largely based on the sketches and drawings from previous expeditions. Its writer states 'our artists have grouped the accompanying series of pictures of the perils to which our adventurous countrymen have been exposed in their attempts to penetrate the icy fastnesses of the North, and to circumnavigate America.'³³

The four engravings were compiled from those illustrations on the *Winter Quarters* constructed by Sir Edward Parry in 1819, and *Cutting out of the Ice* (**Fig 3.21 a& 3.21b**). The article uses a commentary style similar to a panorama programme. There are quotes from such leading explorers as Sir Edward Parry including, 'it was a deathlike stillness of the most dreary desolation and the total absence of animated existence,' and explains, 'the darkness of a prolonged winter now broods impenetrably over the frozen continent unless the moon chance at times to obtrude her faint rays, which only discover the

horrors and wide desolation of the scene. The wretched settlers covered with a load of bearskins remain crowded and immured in their hut, every chink of which they carefully stop against the piercing cold. The sleep of death seems to wrap the scene in utter and oblivious ruin.’³⁴

This subject matter includes movements in the floating ice which represents ‘appalling danger and a hideous and discordant tumult.’ Their escape is allowed by ‘overruling and merciful Providence,’ and is accompanied with the dramatic line used after *Terror* on George Back’s last voyage was suddenly released from an ice floe; ‘there was the stillness of death,’ shown in the picture *Situation of H.M.S. Terror July 1837*. (**Fig1.69**) by William Smythe.

The usual scenes of desolation with the ice holding and then releasing ships reluctantly in the wild landscape are set in a narrative explaining the reasons for a calm sea and large icebergs. *Icebergs, Aurora Borealis, &c* and *Breaking up of the Ice* (**Fig 3.27a & 3.27b**). The arrangement of the these subjects and their importance nearly replicates the work of panorama artists, with ‘remarkable’ icebergs surrounding ships, a walrus and a whale adding relief and interest for the audience, and providing requisite scale. The reader is led into the scene at sea level with fractured ice cliffs forming a *coulisse* over

which appears the extended arch of the *aurora*. A sublime mood is conveyed by the smooth and transparent sea, the stars and the mammals lying easily on the ice. Their readership familiar with Arctic panoramas would transfer by this deliberate duplication their trust for integrity and objectivity in other Arctic stories and reports.

The description of the *aurora* was taken from different sources. Sir Edward Parry and George Lyon in 1819, and an undated and unattributed anthology, *Discovery and Adventure in the Polar Seas and Regions*.^{*} The two officers give accounts of the colours and movements and the particular noise they associate with, but do not actually hear, in its presence. Their descriptions were necessary to both authenticate the picture and to increase the imaginative scope of the subject by hinting that it had a more spiritual meaning. The second source is again descriptive and speculates for the readership by alluding to the hovering light as ‘merry dancers,’ and an ‘indescribable air of magic in the whole scene made wonderful by an untaught American Indian who viewed these as ‘the spirits of his fathers roaming through the land of souls.’³⁵

This illustration is followed by the engraving in the same issue

^{*} There is no publication of this title within the bibliographical record by any Polar explorer or the Admiralty. Neither of these two specific ships commanded by James Cook in Antarctica, were involved in this part of the Arctic. Cooks ships were famous so that their inclusion gave strength to the article.

captioned *Remarkable Aurora Borealis seen from the Daedalus, in the Atlantic Ocean, Aug 9th, 1849.* (**Fig 3.27**). The ship and its location are given and that the source originated from, ‘a common centre of light but not the sun, far below the horizon’ and represented ‘several halos or wide rays of light.’ The scientific explanations are missing despite many sightings and measurements made from expeditionary observatories over 40 years. Illustrated magazines in spite of their educational zeal found *auroras* esoteric symbols of the Arctic arcana allowing readers to form intriguing spiritual and scientific ideas onto the heavenly spaces.*

A front page leader re -states the role of British scientific study and exploration and the importance of reaching solutions to ‘interesting problems of magnetism and electricity’ adding ‘who in these days shall be hardy enough to set bounds to the limits of scientific discovery?’ This leader writer again asks the question as to whether the British were the race most fit for the task of discovery and scientific advancement in all corners of the globe. This proposed that that the generally accepted truth was that the ‘scientific value outweighs the commercial in the estimation of the British genius.’³⁶

* Spufford confirms this idea by describing them as ‘a feast of phenomena sure to minds interested in perception and sensation; inquiries into imagination for here (the Arctic) was a place where nature behaved like fantasy’. F. Spufford. *I may be some time*. Faber and Faber London.1996 p 77.

The growing *ILN* readership was needed by government to sustain a level of public opinion in favour of the expensive expeditions. This seems obvious from the editorial positions supporting all national and imperial interests given to their exploration coverage. This appears less obvious in the panorama descriptions and programmes as these relied far more on visual imagery for their success and critical response without so much on interpretation and comment.

The identical material from the *ILN* feature appeared in the *London Saturday Journal* in November, 1849. This publication had a middle brow didactic readership which Hibbert suggests took from both illustrations and text a fundamental implication of visuality and textuality, such that each began to seem incomplete without the other.³⁷ As newly made engravings for views similar to those from voyage accounts were costly, the same stock of material was recycled. Scenes relating to the Arctic are used with quotes or commentaries brought up to date by witnesses if willing, from new searches. But the magazines lacked the most significant element in the all embracing views. They could not reproduce the subtleties of colour or light exchanged between the ice and the Arctic sky nor the dramatic moving ice forms ingeniously presented in panoramas and dioramas. The Arctic landscape presented on news print was monochromatic and

repetitive which limited public appreciation of its insubstantial and unique beauty.

Robert Burford's panorama of 1850 was the first new Arctic production to open at the start of the Franklin era using James Clark Ross' unsuccessful search for the theme. See Chapter 2. Months before this production was completed the *ILN* had published a short article describing the results of this expedition between 1849 - 1850. In *Sir James Ross' Expedition*, two illustrations are deliberately positioned to suggest to readers that any hope of finding the expedition was in the hands of God. *The Return of the Dove* and *Appearance of the Sky at Port Leopold* (**Fig 3.28**). A connection is implied between Noah and his Ark and his salvation with that of John Franklin. A piece of verse reminds readers that, 'There was hope in the Ark at the dawning of Day. Reliance on God is the Dove to our Ark, and Peace is the Olive she plucks in the dark, the deluge abates, there is sun after rain - Beautiful Dove thou art welcome again'! The *parheliae* sketched by William Browne was suggestive of the Holy Cross or a protective angel even pointing to the missing ships safely under Divine protection in that direction.³⁸

The *aurora* and *parheliae* were included in coverage by the *ILN* review of *Burford's Panorama of the Polar Regions – The*

'Investigator' Snow- walled in for the Winter. (**Fig 3.23**). The review praises its content, 'wonderful power and intensity of effect, characteristic of the supernatural aspects of the Polar regions,' whilst commenting on the 'primitive limestone, mostly horizontal, sometimes piled with great regularity at others so confused that they mark some great convulsion of Nature.'

The following year taking sketches brought back by H.M.S. *Assistance* in 1851, the *ILN* published an article which showed three graves and a cairn captioned *Cairn left by the North Star and four graves in Wolstenholme Sound.* (**Fig 3.24**). Such little new information on Franklin was brought back that the *ILN* used a stock of engravings of *mirages* and *parheliae*, combined with portraits of Eskimaux about whom nothing is explained by the text. Material was added in the scenes showing sledges drawn by large kites. *Western Division of Sledges* (**Fig 3.25**) but the author remarks upon the 'sufferings of the exploring parties from exhaustion and intense cold.'³⁹ It refers to the 'daring energy and the endurance of our countrymen which cannot be too highly praised.' The sledging scenes were newsworthy, showing new and enterprising initiatives taken by the searching parties, even though by this time, five years on, Franklin was widely presumed to be dead. The graves of men from a searching

expedition and the cairn were included quite probably, to help prepare the reader of his end.⁴⁰ Other newsworthy discoveries reported by both the *Morning Post* and the *ILN* included lava and lead deposits, and ‘mineral stones from Melville Island that are remarkably heavy.’⁴¹

The return of the *Investigator* was covered by the *ILN* under *HMS Investigator in the Arctic Regions*. (**Fig 3.26**). The engravings made from Samuel Gurney Cresswell’s sketches used in the commemorative folio showed them ‘in the dreary, ice bound regions of the Polar seas.’ The article proposed that the public must purchase an Admiralty chart to follow the *Investigator*’s route and the completion of a North West passage. Its author states that Admiralty guidance allowed him to use quotes from certain specified extracts in ‘a strictly word for word form’, this being required to obtain the use of suitable sketches and despatches.⁴² The lack of any convincing evidence that Franklin had penetrated west as far as the *Investigator* is delivered in one paragraph and the important scientific results, including the smoking cliffs and geological samples go unmentioned. The existence of a North West passage, to the ‘great satisfaction of their Lordships at the Admiralty’ is celebrated with the stated intention that more of Cresswell’s illustrations would be included in a later edition. This was never done. Sir Edward Belcher’s two volume voyage account with many

illustrations and diagrams, received no coverage in the *ILN*. The censorship used by the Admiralty gave restricted permission for pictures and quotes by naval officers for use by newspapers. The loss of four large ships by Belcher for which he was court martialled, was embarrassing to the Royal Navy and no pictures or reports were released.

The Times of London commenting on these two voyages as if for the entire nation, ‘we have had quite enough of great Arctic expeditions; since Sir Edward Parry’s first voyage in 1819 -20, with the single exception of Captain McClure’s, they have invariably resulted in disappointment and disaster.’⁴³ The *London Gazette* also announced, somewhat prematurely, that the search for Franklin was over.⁴⁴

Privately funded unofficial expeditions on both sides of the Atlantic continued but their accounts provided similar material to that already established record for the Arctic and the ice. One illustration produced for Harpers Weekly, in October 1859 concluded regular coverage by newspapers on both sides of the Atlantic. First published in America and subsequently printed by the *ILN*, *The Discovery of the remains of the Franklin Expedition.* (**Fig3.27**) required extra little explanation from the text.

Sir John Barrow insistence that Franklin’s expedition would complete

the passage came from his obsessive determination to both demonstrate British naval supremacy and British scientific expertise to the world. Imperial ascendancy over extremes of temperature, unknown geography, weather, and the random and destructive movements of ice. The amounts of data gained were never entirely consolidated so that its usefulness is not easily appreciated. But the geological proof that the region had not always been under thick ice changed a number of important geophysical preconceptions.

The best known Victorian painting connected to the North West passage by Sir Edwin Landseer, (1802 – 1873), with *Man proposes, God Disposes* (**Fig 3.28**) was painted in 1865, and has been described as the lasting epitaph for the voyages. Ian Barras Hill considers the work as a form of story using animals as principal players, and with a purpose that would profit the mind.⁴⁵ Some commentators and reviewers considered it satirical.⁴⁶ The darkness of the subject matter was accountable in some critics view to Landseer's fatalistic moods in his later life, stemming from a decline in mental health self recrimination and frustrated grief.⁴⁷

The picture in certain respects resembles treatments used in panoramas including carefully placed foreground items such as 'washed up relics' including a telescope, an officer's coat, a notebook

indicating scientific intent, and a badly torn Union Jack. The picture is painted and composed for those proportions of length to height consistent with a panorama. It clearly suggests that the human bones discovered had been chewed by bears.⁴⁸ The review of this picture in the *ILN* suggested that although, ‘extraordinarily original and imaginative’ it was too ‘harrowing for the proper function of art.’⁴⁹

The ‘vigour which we feel was apparent’ suggested by Frederic Stevens in his biography of Landseer came from a reinvigorated spirit, not an ailing one. Stevens maintains that for this picture the artist needed ‘a vigour and spirit that was fit for an eloquent demonstration of such a chaotic drama of nature and the Darwinian theme of survival of the fittest.’⁵⁰ The scene is composed of purple mist and the ‘lurid’ light of the Arctic twilight acting like a curtain drawn aside from a dark secret, momentarily displayed. The deep shadows through parts of the ‘fantastic’ ice and the grotesque expressions of the bears being reminders of that savage ‘otherness’ of the surrounds of the North West passage. Stevens’ assessment, written for the magazine *Portfolio* states that it ‘touched the very verge of melodrama, that part of modern design which is an offence against noble and pure taste,’⁵¹ The shock at the subject matter at its first showing was to become popular with a Victorian public, well used to ‘tales of expansion and

exploration. The armchair explorers who relished tales of cold, privation and hunger.’⁵² The memorable title from an old proverb, and a black and white engraving made by Thomas Landseer A.R.A, the artists son, in 1867 helped develop interest in the painting.

The British expeditionary voyages through their serial accounts and illustrations represent an Imperial procession through the Arctic regions in pursuit of scientific, geographical, commercial and strategic advantages against declining public enthusiasm in Britain or any strong scientific justification. Landseer’s painting combined for mid Victorian society, the aspects of national identity that these expeditions carried, adding messages about the ‘superstitious awe’ that the authors and their voyage artists frequently describe in their encounters with the ice.

¹ Richard J. Cyriax. *Sir John Franklin's Last Expedition* Plaistow and Sutton Coldfield. 1997. pp 18 -25.

² Glyn Williams. *Arctic Labyrinth .The Quest for the North West Passage*. Allen Lane. London. 2009. p 272.

³ Sophie Gilmartin. *The Cravings of Nature. Landseer's ' Man Proposes, God Disposes' and the Franklin Expedition*. Royal Holloway College. London. Provenance and description of RHC THC 0032.

⁴ Sir John Barrow Bart. F.R.S. *Letter to Lord Haddington. First Lord of the Admiralty*. December 1844. P.R.O. ADM 2/1. 2341. ' It may be presumed that a distance of 300 leagues on a clear sea keeping midway between Bank's Land and the Coast of America would accomplish an object which at intervals during 300 years has engaged the attention of Crowned Heads, men of Science and Mercantile bodies whose expectations were frequently disappointed but not discouraged'.

⁵ Sir John Barrow. Bart. F.R.S. *Voyages of Discovery and research within the Arctic regions from the year 1818 to the Present Time*. John Murray. London 1846. Pp14,15.

⁶ Francois Etienne Musin. (1820 - 1888) *H.M.S. Erebus in the !ce*. 1846. Oil on Canvas. 114.5 x 178.0cm. NMM BHC 3325.

⁷ *Report of the Committee appointed by the Lords Commissioners of the Admiralty to enquire into and report on the recent Arctic Expedition in Search of Sir John Franklin together with the Minutes of Evidence presented to both Houses of Parliament by Command of Her Majesty*. Eyre and Spottiswoode. London. 1852.

⁸ Robert Le M. McClure. R.N. *The Discovery of the North West Passage by H.M.S. Investigator, 1850,1851,1852,1853,1854*. Ed. Sherard Osborn R.N. Samuel Gurney Cresswell R.N. Longmans Brown, Green, Longmans and Roberts. 1857.p100.

⁹ Trevor H. Levere. *Science and the Canadian Arctic, 1818 - 1876. From John Ross to Sir George Strong Nares*. Institute for the History and Philosophy of Science and Technology. Ontario Canada. Vol 41. No 2. 1988 pp.127 - 137.

¹⁰ Robert Le M. McClure. R.N. *The Discovery of the North West Passage.1850,1851,1852,1853,1854*. Ed. Sherard Osborn R.N. Samuel Gurney Cresswell. R.N. Longman, Brown, Green, Longmans and Roberts. London 1857. Appendix I p. 40.

¹¹ G.L Herries Davies. *Whatever is under the Earth*. The Geological Society of London. 1807 - 2007. The key figure in the introduction of glacial theory was the

distinguished naturalist was Jean Louis Rodolphe Agassiz in 1837. He showed that the entire northern hemisphere from the North Pole down to the latitudes of the Caspian and Mediterranean Sea had until recently been shrouded beneath a vast ice sheet. This theory was finally adopted with the accumulated factual evidence, including Murchison's use of evidence from H.M.S. Investigator, and later, in 1863, by Robert Jameson, James Geike, Charles Lyell and James David Forbes. All leading British geologists

¹² John Charles Olmstead. *Victorian Painting. Essays and Reviews*. Garland Publishing Inc. New York. 1983. The article is by Frederic G. Steven. *The Gem* No 2. February 1850. 59 -64. p46

¹³ Robert M.Le McClure R.N. *The Discovery of the North West Passage. 1850, 1851, 1852, 1853, 1854*. Ed. Sherard Osborn R.N. Samuel Gruney Cresswell. R.N. Longman Brown, Green, Longmans and Roberts. London. 1857. p95. They are described as a 'lonely expiring race.'

¹⁴ Robert M.Le McClure R.N. *The Discovery of the North West passage. 1850. 1851, 1852, 1853, 1854*. Ed. Sherard Osborn R.N. Samuel Gurney Osborn. R.N. Longman Brown, Green, Longmans and Roberts. London 1857. p 211. The several references to the absence of Glaciers and the differences between floe ice and berg ice are mentioned as well as the appearance of the aged sea ice. These geological comparisons are seemingly an attempt to present the main features of land and frozen sea in a reconcilable scientific manner.

¹⁵ The records of the sledging parties include several locations of fossilized forests and tree specimens from the North American continent.

¹⁶ The Dictionary of Art. (Ed J.Turner) *Chromolithography*. Vol 19. Macmillan London. 1996.

¹⁷ *The Discovery of the North West passage by H.M.S. Investigator Captain Robert M. McClure. 1850 1851, 1852, 1853, 1854*. Ed. Sherard Osborne R.N., S. Gurney Cresswell R.N. Longman, Brown, Green, Longman, and Roberts. 1856. p 304. 'All England's sympathies and feelings were enlisted in the war with Russia.'

¹⁸ Edward Belcher R.N. *The Last of the Arctic Voyages. The Expedition in H.M.S. Assistance.. In search of Sir John Franklin. 1852, 1853, 1854*. Rediscovery Books. R.G.S. Uckfield. 2006. Vol. II. Pp298 - 306. Belcher identifies three categories.. Stars and Garters, Rain, and Bad-omened. All identified with anticipated weather conditions..

¹⁹ See Fig 2.12. Chapter 2.

²⁰ Edward Belcher. R.N. *The last of the Arctic Voyages; being a narrative of the Expedition in H.M.S. Assistance 1852, 1853, and 1854* Vol. 1. p 14.

²¹ Edward Belcher. R.N. *The Last of the Arctic Voyages: being a Narrative of the Expedition in H.M.S. Assistance. 1852,1853, and 1854.* Vol 1. p229.

²² Edward Belcher R.N. *The Last of the Arctic Voyages: being a Narrative of the Expedition in H.M.S. Assistance .1852,1853, and 1854.* RGS London 2006. Vol.1. Page 169.

²³ Edward Belcher. R.N. *The Last of the Arctic Voyages being a Narrative of the Expedition in H.M.S. Assistance. 1852,1853, and 1854.* RGS London.2006. Vol II p 196. ‘ Lieutenant Hamilton made a journey of 152 travelling hours from Dealy Island, averaging on 61 journeys, 18.8 geographical or 21.7 statute miles at the drag rope! A feat as far as the human constitution and the courage and spirit of the British seaman is concerned, I think, without a parallel.’

²⁴ Belcher describes the ice as in an ‘enraged, as it were, in a state that it could not reach us, vented its spleen on the barriers aground piling slab upon slab until all was confused’. Eventually this led to a ‘barrier of 12 feet in height forming a natural rampart including Assistance and Pioneer within its bounds. The squeezing of our bows continued to harass us much’. Vol II p 58.

²⁵ Edward Belcher R.N. *The Last of the Arctic Voyages being a Narrative of the Expedition of H.M.S. Assistance. 1852,1853, and 1854.*RGS London.2006. Vol II p 92.

²⁶ Edward Belcher R.N. *The Last of the Arctic Voyages being a Narrative of the Expedition of H.M.S. Assistance. 1852,1853, and 1854.* RGS London. 2006. Vol I p vii.

²⁷ Edward Belcher R.N. *The Last of the Arctic Voyages being a Narrative of the Expedition of H.M.S. Assistance.1852,1853,and 1854.* RGS London 2006. p. viii.

²⁸ Anthony Brandt. *The Man who ate his Boots.* Jonathan Cape. London 2011.p360.

²⁹ Peter W. Sinemma. *Dynamics of the Pictured Page. Representing the Nation in the Illustrated London News.* Ashgate. Aldershot. 1998.p206.

³⁰ Richard Altick. *The English Common Reader.* University of Chicago Press. Chicago. 1957. p 344.

³¹ Illustrated London News. May 14th 1842. No 1. P.1.

³² *Illustrated London News* No 160. 24/5/1845. The illustration shows the ships sailing down the Thames with the passengers in two small rowing boats in the foreground unemotionally watching their departure..

-
- ³³ Illustrated London News. October 13th 1849. No 394. Vol XV.pp248 -249.
- ³⁴ Illustrated London News. October 13th 1849. No 394. Vol XV. p 248.
- ³⁵ Illustrated London News. October 13th 1849. No 394 Vol. XV. p249.
- ³⁶ Illustrated London News. October 13th 1849 No 394. Vol XV Front page.
- ³⁷ Christopher Hibbert. *The Illustrated London News. Social History of Victorian Britain*. BCA. London.1976 p 77.
- ³⁸ Illustrated London News. December1st 1849. No 401. p360.
- ³⁹ Illustrated London News. November 29th 1851. No 531. p 638.
- ⁴⁰ J.D. Hooker *On some collections of Arctic Plants, chiefly made by Dr Lyall, Dr Anderson, Herr Murtsching and Mr Rae during the expeditions in the search for Sir John Franklin under Sir John Richardson, Sir Edward Belcher, and Sir Robert McClure*.1857. Journal of the Linaean Society. Botany.1. pp 114-119..
- ⁴¹ The Morning Post. *Arctic Regions*. November 4th 1853.
- ⁴² The Illustrated London News. October 29th 1853. p361.
- ⁴³ *The Times of London*. October 21st, 24th 26th and 30th. 1854.
- ⁴⁴ *The London Gazette*. January 20th 1855.
- ⁴⁵ Julian Treuherz. *Victorian Painting*. Thames & Hudson London.2001 p34
- ⁴⁶ Ian Barras Hill. *Sir Edwin Landseer. The Peoples Artist*. Illustrated London News..27th October 1973. No 1895.
- ⁴⁷ Ian Barras Hill. *Landseer. An Illustrated life of Sir Edwin Landseer.1802 - 1873*.Shire Publications Ltd. 1976.p 41 ‘ Landseer was suffering from what today would be called Schizophrenia.’
- ⁴⁸ Ken McGoogan. *Lady Franklin’s Revenge*. Bantam Press. London. 2006. p 396
- ⁴⁹ Illustrated London News. 7th May 1864.
- ⁵⁰ William Vaughan. *British Painting .The Golden Age*. Thames and Hudson. London 1999. p173.
- ⁵¹ Frederic Stevens. *Portfolio*. (Ed. P.G. Hamerton). January. 1871.

⁵² Sophie Gilmartin. *The Cravings of Nature; Landseers's Man Proposes, God Disposes and the Franklin Expedition*. Royal Holloway College. University of London.

Conclusion

This thesis examined 19th century Polar exploration using the original pictorial record and engravings chosen for the published voyage accounts. The pictorial account was compared to the written narratives in order to evaluate both subject choice and objectivity. This assessment method was again used for the panoramas and theatrical shows which featured Polar expeditions and where evidence exists in the form of programme notes or key drawings, and with critical reviews and articles by the British print media.

Two voyages by Captain James Cook, one to Antarctica and the other into the Arctic Ocean in the late 18th century, provided records for ice conditions which show the difficulty in accounting for its formation, appearance and behaviour in the absence of scientific or empirically based evidence. Several of Cook's assumptions were accurate but the work by two trained landscape artists on his ships, was limited in scope due to a lack of material considered of interest, commercial exigencies, and Cook's personal misgivings about ice. Both individuals were subject to his strong commitment to objectivity although the combined narratives for these voyages indicate the representational difficulties they faced in the inexplicable and oneiric shapes amidst the ice shrouded in fog.

Cook's objectivity about ice and the desire of the British Admiralty to scrutinise the Arctic region as scientifically as possible, meant that pictorial records were kept by selected naval officers appointed for each expedition. These officers were constrained by their training and the orders from the Admiralty, to treat all subject matter found in an orthodox manner as if for the coastal profile. As amateurs they produced pictures limited by natural ability and previous

practice mainly at sea drawing clouds, atmospheric conditions, coastal geology, topography and wild life. Few of them had previous Arctic experience before their initial commissions although by the end of this period some had participated on several voyages.

The treatment they gave to the ice is persistently and consistently that of a relentless enemy against which the naval ships and their crews are engaged. These images are emphasised by the professionally redrawn engravings made for the published accounts by the Admiralty, and by new print technologies, including lithography and chromolithography.

What was released for public consumption was a managed account extolling the heroism and dedication of naval personnel in their search for the passage and new scientific discovery. The Arctic ice was a uniquely dangerous and unexplored setting through which the naval expeditions progressed with success accorded to those who survived months in the winter ice, and made incremental increases to geographical knowledge.

With a few exceptions the visual accounts did not portray ice in any positive or romantic manner or with the teleological appreciation or understanding of its role in the creation of the earth's surface. The work produced by George Back is one exception.

The opportunity to witness that 'sublime' Arctic with its romantically infused 'deathlike stillness' as invoked by authors and poets, was fortunately provided to the British public by the all embracing shows.⁺ The development of the panorama during the mid 19th century using professional landscape painters and many visual

⁺ Chauncey C. Loomis. *Nature and the Victorian Imagination*. p.103. The examples he gives include Charlotte Bronte with her descriptions of Arctic birdlife based on Bewick's engravings in *Jane Eyre*, Edgar Allan Poe with *Narrative of Arthur Gordon Pym of Nantucket*, and Mary Shelley with *Frankenstein*. The *Ancient Mariner* by Samuel Taylor Coleridge being the most influential of all.

improvements created by new lighting effects, showed to the public the hitherto unexpected colours in Arctic ice, the ‘fugitive effects’ caused by extreme temperatures, and the unique meteorological phenomena visible in those regions. The panoramas and shows were educationally focussed on all scientific evidence that established or explained any relationship between earth magnetism, the *Aurora Borealis* and heavenly galaxies in illuminated night skies. These conditions in various combinations formed an intensified visual and intellectual appreciation of the Arctic softening previously held convictions of harshness and terror. The ‘all embracing’ views, tableaux including Eskimaux, and exhibitions showed too that the ice covered landscape especially if occupied by a technologically superior nation like Great Britain, could be occupied for the future. A similar kind of imaginative fiction discussed after the space exploration and manned moon landing of the 1960’s.

Most voyage accounts register pervasive feelings by the officers of a divine ‘providence’ or ‘presence’, especially at moments of crisis. That feeling is frequently linked to the *aurora borealis* and strange portents including *parhelion* and *parheliae* whilst the intensity of the night skies are similarly vested. The visual record indicates the potency these phenomena represented set high above the lonely desolate expanses of the North West passage, and the edge of the known world. The ephemeral unworldly forms they took made, for most expedition artists, an unrealisable or effective account.

Icebergs are shown in two separate paradoxical contexts. Mostly as rogue elements in nature with titanic and unpredictable destructive powers, and at other times symbols of God’s creation admired for their ghostliness or special singularity with resemblances described as ‘remarkable.’ The icebergs and their appearances are usually active participants in narratives of each expedition to the Arctic and also silent

witnesses to the providential escape of those expeditions. The nightmarish quality of the giant tabular icebergs of Antarctica in combination with two newly discovered and active volcanoes, indicated that the South Polar regions were more chthonic than Northern Polar regions and were unsuitable for any productive exploration or settlement. The measurements of the ice shelf or barrier below large glaciers and the volcanoes, demonstrated geological differences between the Polar extremities.⁺

The reflection and colours of a large iceberg in the Hudson's Strait was sketched and then developed as a watercolour by George Back, R.N. This was strangely omitted from his own published account, which, given his experience and competency as an artist and the narrative commentary as expedition leader. It is a view of ice that also relates objectively to Cook's remarks about colours in ice during his voyage towards the South Pole.

As natural spectacles the beautiful iceberg was unsuitable or unjustifiable as subject matter for the conventional naval artist. The painting *The Iceberg* by the American wilderness painter Frederic Edwin Church, exhibited in 1861, demonstrated to the British public for the first time, a complexity of structure, intense spiritual qualities, and their delicate and translucent colours when studied close to and rendered in oil paint by an outstanding luminous artist.*

The scientific context for the ice during the expeditionary era was reinforced by the illustrations chosen for the published records and by adaptations endorsed by officers, for new panoramas and shows. The British public were told that finding the North West passage was one part only of this national and international enterprise. No other nation on earth Sir John Barrow insisted, could perform these scientific undertakings

⁺ The Northern Pole is on an oceanic icecap, and the Southern Pole is a continental landmass.

* Church's paintings were described as 'cogent parables for God's chosen people. Characteristic fusion of scientific observation, religious faith and the symbolic use of light.' David Huntingdon. *Church and Luminism* Wilmerding. 1980. p155.

and succeed, leading them to be seen as an ideal, bound into the national identity as a consequence.

Despite the collection and assimilation of various composite records for the new coasts and channels discovered, naval artists were usually not required to show ice types, conditions or its surrounding weather. Large quantities of useful information from recording apparatus was gained but little about any new or challenging ice conditions. William Scoresby and Bernard O'Reilly's sketches attempted to give a consolidated account and record but their first hand evidence of the formation of ice at sea, denied even by James Cook, was unacknowledged by the Royal Navy until the third Arctic expedition of Edward Parry 50 years later

The land expeditions sketched and painted by George Back show tantalising views of an ice free coast close to the Canadian mainland but a channel through which few large ships could ever hope to navigate. The land surveys, organised with the help and encouragement of the HBC, the Royal Society and the Royal Geographical Society established the greater part of the coastal geography for a North West passage but contributed little knowledge about ice. The exploration did explain that for swift travel through Arctic snow and tundra, light equipment and fur clothing using Eskimaux knowledge and their skills as guides, was more practical than using a naval ship or heavy British sledges.

The discovery of a North West passage by Robert McClure commanding the *Investigator* shown in eight selected chromolithographs, based on watercolour sketches by Samuel Gurney Cresswell, presented the voyage and overland sledging as a triumphal outcome for the Royal Navy after many years of epic contest against the ice. A contest completed at the cost of Sir John Franklin and the lives of 160 men which the British press condemned as too large for the long, costly and

mainly unproductive Arctic enterprise..

Sir Edward Belcher's voyage, the last combined scientific and searching expedition sent by the Admiralty, gathered quantities of new information from sledge searches which included a range of different ice crystals. Belcher from these was to realise that knowledge of crystallography by scientists was very limited and that Arctic ice was just as unpredictable and inexplicable to the scientist as well as the navigator as it had been at the time of the first expedition. The most important fact that artists and geologists had uncovered was that the Arctic region, during its pre history, had been free from ice and underwent a semi tropical climate indicated by the crustacean, wood and plant fossils recovered from the seabed. Sketches and engravings as well as the actual fossil and rock samples were compelling evidence strongly in favour of this pre ice age period, a subject that divided religionists and scientists over the cause of the geophysical appearance of the earth's surface.

Edwin Landseer's painting of bears, rock like ice pieces, scattered human artefacts and a torn Union flag, related to the few discoveries from those remains discovered of the lost expedition making his picture an ironic epitaph for the British nation, not only about the costly and seemingly pointless search for the North West passage, but for Arctic science in general. Franklin's ships were lost in a complex part of the Arctic archipelago in a place normally closed by ice all year round. He had entered this channel which had been clear of ice on their arrival, and became permanently trapped as thick ice quickly returned. No searches were made in this part of the passage since the route he had chosen was considered impracticable.

The visual records made during the scientific scrutiny of the Polar regions employing leading scientists alongside the naval artists were objective and self confessedly repetitive. They were complementary to the written accounts and ventured little

beyond the defined subject matter decided by the Admiralty and the commanders..

The policy of the British Admiralty not to employ professional artists ensured this approach was consistent for all North West passage voyages as well as the Antarctic voyage of James Clark Ross. The heroic and epic nature of the exploration period showing the contest between ships and men against the ice, displaced opportunities when with a more expansive and detailed engagement with ice, such as those demonstrated by Frederick Beechey and William Westall, might have advanced the understanding of the types, movements and corresponding atmospheric conditions ice represented.

Edward Belcher's conclusion was that Franklin's disappearance and the failure to discover him in time proved conclusively that a proper understanding and meaning for ice had still not been reached

BIBLIOGRAPHY

PRIMARY SOURCES

Allen. John F. 2004 'Thomas Luny and Cook's Resolution' *Mariners Mirror* Vol. 90. 2004

Back R.N, Captain George. 1838. *Narrative of the Arctic Land Expedition to the mouth of the Great Fish River and along the shores of the Arctic Ocean. 1833, 1834 and 1835* (London: John Murray)

Back R.N, Captain George. 1838. *Narrative of an Expedition in H.M.S. Terror undertaken with a view to geographical Discovery on the Arctic Shores in the years 1836 - 1837* (London: John Murray)

Barrington, Daines. 1774. 'The Probability of reaching the North Pole' discussion at F.R.S. meeting of the Royal Society, London May 19th 1774. Vol.1. Tracts.X17/2-3.

Barrow F.R.S, Sir John .1819. 'Commander John Ross and the Croker Mountains' *Quarterly Review* Nos.21/24, 1819.

Barrow. F.R.S, Sir John. 1828. 'Parry and Weddell's Voyages' *Quarterly Review* No 34. 1826. LXXIV /4 1828.

Beechey R.N, Frederick William. *A Chart of the North Coast of Spitzbergen (from a Survey made at Sea). Also shewing the position of the ice and Track of H.M.Brig Trent between May 30th 1818 and August 31st following.* +87 AK2 M=39.

Buache, M. Geographical and Physical Observations including a Theory of the Antarctic Regions, and the Frozen Sea which they are supposed to contain, according to the Hypothesis of the Celebrated M. Buache. *The Gentleman's Magazine*. William Pickering, John Bowyer Nichols and Son. London. January. 1863.

Cook R.N., F.R.S, Captain James. *Notes on Sea Ice observed by During his circumnavigation of Antarctica. 1772 - 1775.* (abstract) ed. H.F.P. Herdman *Journal of Glaciology* Vol.3 March 1957. No. 21

Cook F.R.S, Captain J.& Furneaux, Captain T. 1777 *A Voyage towards the South Pole, and Round the World. Vols. I and II.* (London: W. Strachan & T. Cadell)

Dictionary of Works Exhibited at the Royal Society of British artists 1824 - 1893 and the new English Art Club (Woodbridge: Antique Collectors Club)

Franklin R.N.,F.R.S, Captain John. 1828. *Narrative of a second Expedition to the Shores of the Polar Sea in the years 1825,1826, and 1827. Including the Account of John Richardson M.D. F.R.S. F.L.S.* (London: John Murray)

Franklin R.N, F.R.S Captain John. 1828. *Notes to the Narrative of a Second Expedition to the Shores of the Polar Sea in the years 1825 1826, and 1827* (London: John Murray)

Kirwan, L.P. *The White Road; A Survey of Polar Exploration* 1959. The North West Passage Map showing the tracks of William. E. Parry 1819 -1820, John Franklin 1845 - 1848, Robert M.McLure 1850 - 1854, Richard Collinson 1850 -1855, Roald Amundsen 1903 - 1907 Spottiswoode, Hollis and Carter. London.

McClure R.N, Commander Robert. *Collection* (GB 15. 1845 - 1855. GB 15 MS.1044/8/9 D. 2 Letters MS 1226/18/1 - 4D 4 Letters)
McClure R.N, Robert J. le M. *Private Journal of a Voyage of Discovery on board HMS Terror under the Command of Captain George Back in Search of a North West passage. Commencing June 1836 ending September 1837* (AR S5C /106/pt1)

McClure R.N, Commander Robert J. le M. *Letters (4) to Sir James Clark Ross. 1849 - 185.* (MS 1226/18/1 - 4;D)

MacKenzie, John. 2001.*The Victorian Vision. Inventing Britain* (London: V&A Publications)

Murchison, Sir Roderick Impey. *Obituary for Rear Admiral Frederick William Beechey.* Royal Geographical Society Journal. 1857. No 27 xciv –xcvii.

Parry R.N, William Edward. 1818. *Proceedings and weekly Reports*

(Collection. GB. 15 MS 438/7; BJ)

Parry, Commander W.E. 1821. *Journal of a Voyage for the Discovery of a North West Passage from the Atlantic to the Pacific performed in the years 1819 -1820* (London: John Murray)

Parry, Captain W.E. 1824. *Journal of a Second Voyage for the Discovery of a North West passage from the Atlantic to the Pacific. Performed in the years 1821 - 22 - 23 in H.M. Ships Fury and Hecla* (London: John Murray)

Parry F.R.S, Captain W.E. 1826. *Journal of the third Voyage for the Discovery of a North West passage from the Atlantic to the Pacific. Performed in the years 1824 - 25* (London: John Murray)

Parry R.N, Captain William Edward. 1828. *Journals of the first, second and third voyages for the discovery of a North West passage from the Atlantic to the Pacific, in 1819 -1820 - 1821 - 1822 - 1823 - 1824 - 1825, in His Majesties Ships Hecla Griper and Fury. Vols 1-6* (London: John Murray)

Parry R.N, Captain William Edward. 1828. *Narrative of an attempt to reach the North Pole, in boats fitted for the purpose, and attached to his Majesties Ship Hecla, in the year MDCCCXXVII, under the command of Captain William Edward Parry, R.N. F.R.S. and honorary member of the Imperial Academy of Sciences at St Petersburg* (London: John Murray)

Phipps ,Constantine John, *Voyage towards the North Pole.*(1773 - 1774). Newbery, London. 1774.

Pickering, William. Ed Bowyer,John. *The Gentlemen's magazine.*1834 -1856. BLL 1002844939

Qureshi, Sadiya. 2011 *Peoples on Parade. Exhibitions, Empire and Anthropology in Nineteenth Century Britain.*(Chicago. University of Chicago Press).

Report of the Committee appointed by the Lords Commissioners of the Admiralty to enquire into and report on the Recent Arctic Expeditions in search of Sir John Franklin together with Minutes of Evidence

presented to both Houses of Parliament by Command of Her Majesty.
1852. (London: Eyre and Spottiswoode)

Potter, Dr Russell A. 1998. *Arctic Spectacles; Visions of the North in Panoramas, 1820 – 1874.* Plumstead, A.W. Editor. (Nipissing University Culture Conference.)

Ross R.N, F.R.S. Sir James Clark. 1826. *Morning Herald* 27th August 1826 (Collection GB15 -MS 395 /62/1-5 BL)

Ross R.N, F.R.S. Sir James Clark. 1842. *Letterbook. No 288.*
3.5.1842. *Port Louis, Berkeley Sound. Falkland Islands* (GB 15 - MS 15556 - BJ)

Ross R.N. F.R.S. K.S, Captain J. 1819. *Voyage of Discovery in H.M. Ships Isabella and Alexander for the purpose of exploring Baffins Bay and inquiry into the probability of a North west Passage* (London: John Murray)

Ross R.N, F.R.S. Sir James Clark 1836-1838 *Letterbook. Letters to Captain George Back. British NW Passage Expedition* (GB 15 - MS 395/62/4-5 BL)

Ross R.N, Sir James Clark. 1840 *Collection 1812 - 1860* (GB 15 - MS 1556 - BJ *Letterbook.* MS 1397/1 - 3 Maps; MS 1327/1- 2 Letters. MS 1327/1 -2. Letters)

Ross R.N, Sir James Clark. *Collection 1812 - 1860.* (GB 15 - MS 1556 - BJ *Letterbook.* MS 1397/1 - 3 Maps; MS 1327/1- 2 Letters. MS 1327/1 -2)

Ross R.N, Sir John. *Collection* (GB 15. MS 395/63/1-4; BL ROSS 4 Letters 1833 - 1836)

Ross R.N, James C. and Crozier R.N, Robert M. 1846. *Victoria Land. Discovered in H.M.S. Erebus and Terror. January 1841* (Chart J&C Walker. Board of Admiralty Dec.5th 1846)

Sabine, Sir Edward. *Collection. 1819 - 1858* (GB 15 - MS 332 /62/1BL)

Selous, Henry Courtney *Journal* 1833 MSL/ 1972/5117

Selous, Henry Courtney and Burford, Robert. 1835. *Description of a View of Boothia. Discovered by Captain Ross, in his late Expedition to the Polar Regions* (Burfords, Leicester Square, London. Key Drawing for Panorama AC. 2111208)

Shirley, Ann Savours. 1984. 'A Very Interesting Point in Geography. The 1773 Phipps Expedition towards the North Pole.' *Arctic Magazine*. December 1984. Vol. 37 No4.

Shirley, Rodney. 2001. *The Mapping of the World: early printed Maps 1472 -1700* (Connecticut: Early World Press)

Summary of selected Manuscripts of Historic Importance
1850.London: Admiralty Hydrographical Department.)

Twyman, Martin. *Breaking the Mould: the first hundred years of Lithography*. Pannizzi Lectures. 2001. 686/231/509

Woodward Francis J. 1950. *Joseph Rene Bellot*. *Polar Record*. Vol.5.No39.

JOURNALS AND PERIODICALS

Bell's Weekly Magazine
January 13th 1834

Frazer's Magazine
Vol.43. February 1851
Vol.59. January 1854

Journal of Belles Lettres, Arts, Sciences etc. Review of New Books.
No 1121. London. 4th July 1838.

London Evening Standard
May 28th 1834

Mariners' Mirror
Vol. 90. 2004

Morning Chronicle June 25th 1834

The Gem

No 2. February 1850

The Illustrated London News

Issue No 1. 14/5/1842

Issue No. 160. 24/5/1845

Issue No. 394. 13/10/1849

Issue No. 401. 1/12/1849

Issue No. 433. 23/2/1850

Issue No. 440. 10/8/1850

Issue No. 531. 29/11/1851

Issue No. 630. 2/7/1853

Issue No. 668. 29/10/1853

Issue No. 724. 12/5/1855

Issue No.1258. 7/5/1864

The Mirror

January 8th 1834

Morning Chronicle

June 25th 1834

The Examiner

July 10th 1838.

The Morning Post

January 15th 1834

March 31st 1834

The Saturday Magazine

February 19th 1838

The Times

January 14th 1834

WEBSITES

www.civilization.ca/archive

www.collectionscanada.gc.ca

www.iln.com

www.mallgalleries.org.uk

www.maphistory.info/textworld.html

www.oxforddnb.com/view

www.thetimesonline.com/view

SECONDARY SOURCES

Altick, Richard. 1957. *The Common English Reader* (Chicago: University of Chicago Press)

Andrews M. 1999. *Landscapes and Western Art* (Oxford: Oxford University Press)

Andrews, W.A. 1887. *Famous Frosts and Frost Fairs in Great Britain* (London: George Redway)

Barker, A.R.H., Bigger, G. (eds). 1992. *Ideology and Landscape in Historical Perspective* (Cambridge: Cambridge University Press)

Barrell, John 1972. *The Idea of Landscape and the Sense of Place 1730 - 1840* (London: Cambridge University Press) TREV: Check place of publication?

Barrow F.R.S, Sir John. 1847. *An Autobiographical Memoir of Sir*

John Barrow Bart (London: John Murray)

Beckett, R.B. 1970. *John Constable's Discourses* (Ipswich: The Suffolk Records Society Volume XIV)

Berger, John. 1973 *Ways of Seeing* (New York: Viking Press)

Bolles, E.B. 1999. *The Ice Finders* (Washington: Counterpoint)

Bowen, Margarita. 1981. *Empiricism and Geographical Thought. Francis Bacon to Alexander Von Humboldt* (Cambridge: Cambridge University Press)

Bradford, W. 1873. *The Arctic Regions* (London: Sampson Low, Marston, Low and Searle)

Brazell, J.H. 1968. *London Weather* (London: HMSO)

Brown, Katherine. 2004. *The North Pole* (San Francisco: Crown Point Press)

Burke, Edmund . 1990. *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and the Beautiful* ed. by A. Phillips. (Oxford: O.U.P.)

Burnet, Thomas. 1965. *The Sacred Theory of the Earth* ed. B .Wiley. (London: Centaur Press)

Carmichael, John Wilson. 1864. *The Art of Marine painting in Oil Colours*. (London: Winsor and Newton)

Clark, Kenneth. 1976 *Landscape into Art* (London: John Murray)

Clayton, Timothy. 1997 *The English Print. 1688 - 1802* (New Haven and London: Yale University Press)

Coe, B. 1976. *The Birth of Photography. The story of the formative years. 1800-1900*. (London: Ash and Grant)

Coke, David & Borg, Alan. *Vauxhall Gardens .A History*. Paul Mellon Centre.YUP. London2011.

Coleman, E.C. 2006. *The Royal Navy in Polar Exploration* (Stroud: Tempus)

Cunningham, Andrew, Jardine, Nicholas. 1990 *Romanticism and the Sciences* (Cambridge: Cambridge University Press)

Cyriax, R.J. 1839. *Sir John Franklin's Last Arctic Expedition* (London: Methuen)

David, Robert G. 2000. *The Arctic in the British Imagination 1814-1914* (Manchester: MUP)

Dawson, L.S. 1969. *Memoirs of Hydrography* (London.: Cornmarket Press)

Dodge, Ernest S. 1985. *Dictionary of Canadian Biography. Vol 8.* (Toronto. University of Toronto).

Dyson, John L. 1962 *The World of Ice* (New York: A. Knopf)

Eder, J.M. 1978. *History of Photography. 3rd Ed* (New York: Dover Publications)

Edinger, Ray. 2003. *Fury Beach. The Four Year Odyssey of Captain John Ross and the Victory* (New York: Berkley)

Edwards, Philip. 1994. *The Story of the Voyage. Sea Narratives in eighteenth century England* (Cambridge: Cambridge University Press)

Eisenham, S.F. 1994 *Nineteenth Century Art; A Critical History* (London: Thames and Hudson)

Engell, J. 1981. *The Creative Imagination; Enlightenment to Romanticism* (Massachusetts: Harvard University Press)

Fagan, Brian. 2000. *The Little Ice Age. How Climate made History 1300-1850* (New York: Basic Books)

Foucault, M. 1997. *The Order of Things. An Archaeology of the Human Sciences* (London: Routledge)

- Gosnell, M. 2006. *Ice. The nature, the history and the uses of an astonishing substance*. (New York: A.A Knopf)
- Grant, D. 1951. *James Thomson. Poet of The Seasons* (London: The Cresset Press)
- Halle, Louis.J. 1989. *The Sea and Ice* (New York: Cornell University Press)
- Hardie, W. 1990. *Scottish Painting 1837 - to the Present* (London: Cassells)
- Harvey, Eleanor Jones. *The Voyage of the Icebergs. Frederic Church's Arctic Masterpiece*. Dallas Museum.YUP. New Haven & London.2002.
- Hayes, J. 1970. *Catalogue of the Oil Paintings in the London Museum* (London: HMSO)
- Hemming, G. 1988. *Painters of the Coast and Sea: A History and Gazetteer* (London: Gollancz)
- Hibbert, Christopher. 1976. *The Illustrated London News. The Social History of Victorian Britain* (London: Book Club Associates)
- Hill, Ian Barras. 1973. *Landseer. An Illustrated life of Sir Edwin Landseer. 1802 - 1873* (Aylesbury: Shire Publications)
- Hughes, M.K., Diaz, H.F. 1993. *The Climate of the last 1000 years-have we got it wrong?* (EOS. Transactions. American Geophysical Union)
- Humboldt, A. Von. 1850. *Aspects of Nature in Different Lands and Different Climates; with Scientific Elucidations. 2 Volumes*, trans. by Mrs Sabine (London: Longman, Brown, Green, and Longmans)
- Huntingdon, David. *F.E. Church and Luminism;light for America's elect*'.Wilmerding. 1980.
- Irwin, D. & F. 1975. *Scottish Painters at Home and Abroad. 1700-1900* (London: Faber and Faber)

Jeffery, R.W. 1950. *Was it Wet or was it Fine? Part 1.* (Exeter: Meteorological Office)

Kane, Dr E. K. 1857. *The 2nd Grinnell Expedition 1853-1854-1855* (Philadelphia: Childs and Petersen)

Klonk, C. 1996. *Science and the Perception of Nature. British Landscape Art in the Late Eighteenth and Early Nineteenth Centuries* (New Haven & London.: Yale University Press)

Kriz, K.D. 1997. *The Idea of the English Landscape Painter. Genius as Alibi in the Early 19th Century* (Newhaven & London: Yale University Press)

Levere, Trevor H. 1988. *Science and the Canadian Arctic, 1818 - 76, from Sir John Ross to Sir George Strong Nares* (Ontario: Institute for the History and Philosophy of Science and Technology. University of Toronto Vol. 41. No 2. June 1988. p 127 - 137)

Loomis, Chauncey C. 1977. *Nature and the Victorian Imagination. The Arctic Sublime* (Berkeley: University of California Press)

Mackenzie, John M. 1995. *Orientalism: History, Theory and the Arts* (Manchester: Manchester University Press)

Macmillan, D. 1990. *Scottish Art. 1460-1990* (Edinburgh: Mainstream)

Martell, P. 1742. *An Account of a Journey to the Glaciers of Savoy in a letter addressed to the English Gentleman, author of the foregoing letter* trans. from the French (London: Du Faucigny)

Mitchell, T.F. 1993. *Art and Science in German Landscape Painting 1770 - 1840* (Oxford: Clarendon Press)

O'Byrne, W.R. 1990. *A Naval Biographical Dictionary. Vol.1* (Suffolk: Hayward)

Oettermann, Stephan. 1997. *The Panorama: History of a Mass Medium* (New York: Zone Books)

Oleksijczuk, Denise B. 2011. *The First Panoramas. Visions of British Imperialism*. University of Minnesota Press. Minneapolis.

Olmstead, John C. 1983. *Victorian Painting; Essays and Reviews* (New York & London: Garland Publishing)

O'Reilly, Bernard. 1818. *Greenland and the Adjacent seas and North West passage to the Pacific Ocean. Illustrated in a Voyage to Davis' Strait during the summer of 1817* (London: Baldwin, Cradock and Joy)

Outram, D. 2005. *The Enlightenment*. (Cambridge: Cambridge University Press)

Paley, Morton P. 1986. *The Apocalyptic Sublime* (New Haven and London: Yale University Press)

Phipps. R.N, James. C. 1774. *A Voyage towards the North Pole (The Gentleman's Magazine SPRI)* *TREV: QUERY* Shd this be in periodicals?

Potter, R.A. 2007. *Arctic Spectacles. The Frozen North in Visual Culture, 1815 - 1875* (Seattle: University Of Washington Press)

Quilley, Geoff (ed.). 2006. *Art for the Nation; the Oil Paintings Collection of the National Maritime Museum* (London: NMM Publishing)

Rigby, Nigel, Van de Merwe, Peter, Williams, Glyndyr. 2005. *Pioneers of the Pacific* (London: NMM Publishing)

Rollins, Henry. (ed.) 1958 *Letters of John Keats*. Cambridge University Press.

Rosenblum, Robert. 1975. *Modern Painting and the Northern Tradition. Friedrich to Rothko*. (London: Thames and Hudson)

Serres, Dominic and Thomas, John. 1979. *Liber Nauticus and Instructor in the Art of Marine Drawing* (London: Scholar Press)

Sinnema, Peter W. 1998. *Dynamics of the Pictured Page. Representing*

the Nation in the Illustrated London News (Aldershot: Ashgate)

Slive, S. 2001. *Jacob van Ruisdael: A complete Catalogue of paintings, drawings and etchings* (New Haven and London: Yale University Press)

Soan, Kim. 1986. *Alexander and John Robert Cozens. The Poetry of Landscape* (Ontario: The Art Gallery of Ontario)

Smith, Bernard and Joppien, Rudiger. 1985. *The Art of Captain Cook's Voyages. The Voyage of the Resolution and Adventure. 1772 - 1775. Vol. 2* (New Haven and London: Yale University Press)

Smith, Bernard and Joppien, Rudiger. 1988 *The Art of Captain Cook's Voyages. The Voyage of Resolution and Discovery 1776 - 1780. Vol.3* (New Haven and London: Yale University Press)

Solkin, David. 1992. *Painting for Money: The Visual Arts and the Public Sphere in Eighteenth - Century England* (New Haven and London: Yale University Press)

Spufford, Francis. 1996. *I may be some time. Ice and the English imagination* (London: Faber and Faber)

Stafford, Barbara Maria. 1984. *Art, Science and Nature: Travel accounts 1760-1840* (Massachusetts: M.I.T.)

Stainton, Lindsay. 1985. *British Landscape Watercolours. 1600-1860* (London: BM Publications)

Stamp, Thomas, Stamp, Cordelia. 1976. *William Scoresby. Arctic Scientist* (Whitby: Caedmon Whitby Press)

Steven L., Lee. S. 1921 *Dictionary of National Biography. Earliest Times to 1900. Vol VII* (Oxford: Oxford University Press)

Stevens, Frederic, (ed. Hamilton, P.G.). 1871 *Portfolio. English Artists of the Present Day* (London: Allan & Hargreaves)

Stevens, Frederic G. 1883. *Sir Edwin Landseer* (London: Sampson, Low, Marston, Searle and Rivington)

Thomson, James. 1819. *The Seasons* (London: J Sharpe)

Treuhertz, Julian. 1993. *Victorian Painting* (London: Thames and Hudson)

Turner, Jane (ed). 1996. *The Dictionary of Art (Vol.19)* (London: Macmillan)

Twyman, Martin. 2001. *Breaking the Mould: the first hundred years of Lithography* (Pannizzi Lectures) (London: British Library)

Villar, Diana. 1995. *John Wilson Carmichael. 1799-1868* (Portsmouth: Carmichael and Sweet)

Williams, Glyndyr. 2002. *Voyages of Delusion. The Search for the North West Passage in the Age of Reason* (London: Harper Collins)

Wilson, E.G. 2003. *The Spiritual History of Ice. Romanticism, Science and the Imagination* (New York: Palgrave Macmillan)

Wilton, A., Barringer, T., Boettcher, G.C. 202. *American Sublime. Landscape Painting in the United States. 1820 - 1880* (London: Tate Gallery Publishing)

Woodring, Carl. 1989. *Nature into Art. Cultural Transformations in Nineteenth Century Britain* (Cambridge MA: Harvard University Press)

EXHIBITION CATALOGUES

1874 *Catalogue of an Exhibition of the Engraved Works of the Late Sir Edwin Landseer R.A.* (London: Burlington Gallery)

1982 Chapel, Jeannie (ed). *Victorian Taste; The complete catalogue of paintings at the Royal Holloway College* (Egham: Royal Holloway College)

1984 *The Golden Age of British Photography 1839 -1900* ed. M. Haworth-Booth. (V&A , London and Philadelphia Museum of Art,

Philadelphia, Aperture)

1988 *Panoramania! The Art and Entertainment of the 'all-embracing' view* ed. R Hyde. (Trefoil Publications in association with Barbican Art Gallery, London)

1989 *Ruskin and The English Watercolour from Turner to the Pre-Raphaelitism* (Whitworth Art Gallery, University of Manchester. April 6th -30th July)

1989 *The Invention of Photography and Its Impact on Learning* (Photographs from Harvard University and Radcliffe College and from the Collection of Harrison D. Horblit. eds. L.T. Ambler. M. Banta. Harvard University Library, Cambridge M.A.)

1994 *Arctic Artist. The Journal and Paintings of George Back, Midshipman with Franklin, 1819 - 1822* eds. I.S. MacLaren, C. Stuart Houston (Montreal: McGill - Queens University Press)

2004 *William Hodges. The Art of Exploration.* (NMM. Yale University Press)

2009 *To the Ends of the Earth. Painting the Polar Landscape* (Peabody Essex Museum, Salem, Massachusetts November 8th 2008-3rd March 2009)

2011 *Watercolour* ed. Alison Smith (London: Tate Publishing)

APPENDIX

Appendix 1.

Chronology of the searches for Sir John Franklin.

- 1846 - 1847. John Rae. Land Expedition.
- 1848 - 1849. James Clark Ross and Edward Bird. HMS *Enterprise* and *Investigator*.
- 1848 - 1852. Thomas Moore. HMS *Plover*.
- 1848 - 1850. John Rae and John Richardson. Land Expedition.
- 1848 - 1850. Henry Kellett. HMS *Herald*.
1849. Robert Shedden. *Nancy Dawson* private Expedition.
- 1849 - 1851. William Pullen and W.H. Hooper. Small boat Expedition.
- 1849 - 1850. James Saunders. HMS *North Star*.
1850. Charles Forsyth. *Prince Albert*. Private Expedition.
- 1850 - 1851. Henry Austin, Erasmus Ommanney, John Cator, and Sherard Osborn. HMS *Resolute, Assistance, Intrepid and Pioneer*.
- 1850 - 1851. William Penny, Alexander Stewart. HMS *Sophia* and private vessel *Lady Franklin*.
- 1850 - 1851. John Ross. *Felix* and *Mary*. Private Expedition.
- 1850 - 1851. Edwin De Haven and Samuel Griffin. USS *Advance* and *Rescue*. American Expedition.
- 1850 - 1851. John Rae. Land Expedition.
- 1850 - 1854. Robert McClure. HMS *Investigator*.
- 1850 - 1855. Richard Collinson. HMS *Enterprise*
- 1851 - 1852. William Kennedy. *Prince Albert*. Private Expedition.
1852. Edward Inglefield. *Isabel*. Private Expedition.
- 1852 - 1854. Edward Belcher, Sherard Osborn, Henry Kellett and Francis McClintock. HMS *Assistance, Pioneer, Resolute, Intrepid*.
- 1852 - 1854. William Pullen. HMS *North Star*
- 1853 - 1854. John Rae. Land Expedition.
1855. James Anderson. Land Expedition. Canadian.
- 1857 - 1859. Francis McClintock. *Fox*. Private Expedition.
- 1864 - 1869. Charles Francis Hall. Private Expedition .American
- 1878 - 1880. Frederick Schwatka. Land Expedition. American.



PLANTING THE BRITISH FLAG ON THE POSITION OF THE MAGNETIC POLE

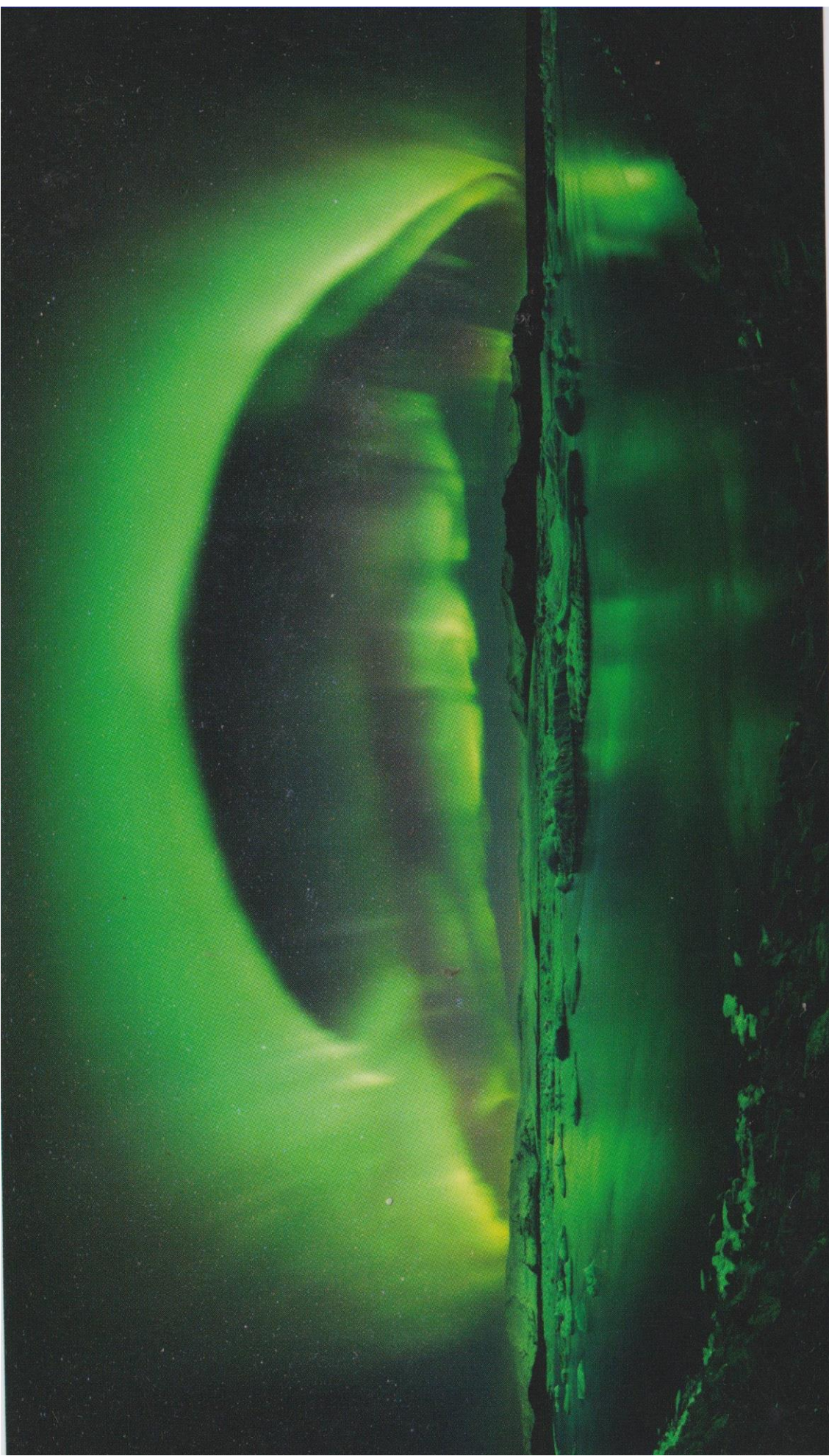


THE VICTORY UNDER PROTECTING WALLS OF SNOW IN FELIX HARBOUR



THE UNION JACK IN GRAHAM'S VALLEY

THE EXPEDITION THAT LED TO THE DISCOVERY OF THE MAGNETIC POLE
 This Arctic expedition, fitted out in 1829 by Sir Felix Booth, was under the command of Sir John Ross and his nephew, Sir James Clark Ross. It was during this expedition that the latter explorer discovered the North Magnetic Pole.



Appendix 3: S Better, *Heavenly light show* (8 composite photographs), 2011

